UNIVERSITY OF TORONTO
DIVISION OF EXTENSION

BUSINESS, ENGINEERING, NURSING
AND SPECIAL PROGRAMMES

1969 - 1970

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OF
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General Information

INTRODUCTION

The Business, Engineering, Nursing and Special Programmes Section of the Division of Extension offers courses which do not lead to university degrees or certificates, but provide opportunity for a systematic study for those wishing to increase their general and specific knowledge. In some cases, students may take courses leading to certificates of a number of institutes and associations from the business community, should they so desire. All the courses offered are designed to provide the student with a continuing education at university level.

ADMISSION REQUIREMENTS

Where special admission requirements apply they are specified in the course descriptions. Otherwise, there are no formal requirements for admission to these courses.

REGISTRATION

Students may enrol by completing an application form, located on the final pages of this booklet. Enrolment may be by mail or in person at the Division of University Extension, Room 104, 84 Queen's Park, Toronto 5, from 8:45 a.m. to 5:00 p.m., Monday through Friday. From September 2 to October 10 the office will remain open Monday through Thursday evenings until 8:30 p.m.

All the information requested on the application form is important. For example, if telephone numbers are not supplied, students cannot be notified of any change which may arise in case of emergency, such as the cancellation or postponement of a class.

Fees are payable in advance, and cheques or money orders should be made payable to the University of Toronto.

COURSE ENROLMENT

Students are urged to enrol for courses as early as possible to ensure admittance. In many courses, enrolment is limited. If more than the stipulated number register for a particular course, an effort will be made to organize an additional class. All courses are subject to change as to time and place before the beginning of the term. Students will be notified of any change.

ADMISSION TO LECTURES

When a student enrols in a course he will receive a receipt which must be presented for admittance to each class.

CHANGE OF ADDRESS

Students should inform the Division of Extension in writing of any change of address. The course in which the student is registered must be indicated.

TEXTBOOKS

Textbooks may be purchased at the University Textbook Store, located at Bancroft and Huron Streets, or may be ordered by telephoning 928-2225. Books will be mailed with an invoice and the account may be paid by cheque.

RECOGNITION

An evaluation of a student's performance is offered in many courses. Grades are assigned and these are based on classroom performance, tests, assignments, or final examinations. The methods used vary from course to course. Students who avail themselves of the opportunities for evaluation will be advised of the results by mail. Results will not be given over the telephone.

Instructors are not required to check attendance; therefore letters cannot be issued certifying attendance.

The courses offered in this booklet do not lead to a diploma or a degree. However, a certificate is available for those registered in a co-ordinated programme.

WITHDRAWALS AND REFUNDS

Notice of a student's withdrawal and of the reasons for this must be presented either in person or in writing to the Division of Extension, 84 Queen's Park. A student is deemed to be a member of a class until he has officially withdrawn and his withdrawal has been accepted. Non-attendance at classes, by itself, does not constitute official withdrawal.

Requests for refunds must be made before the second session of the course is given, and such requests must be accompanied by the University's official receipt. An administration fee of $7.00 will be charged in the case of all refunds.

PARKING

As parking at the St. George Campus is limited, students are urged to use public transportation.

Course Schedule

Fall term ends on December 15
Winter term commences on January 5
No classes will be held on Thanksgiving Day, October 13

Telephones
General Information — 928-2393
Detailed Information — 928-2400

The Division of University Extension reserves the right to withdraw any course listed in this booklet.

Course Index

*Denotes Courses by Correspondence

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ECONOMICS AND FINANCE

EDUCATION

ENGINEERING AND SCIENCE

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84, Queen's Park
The administrative centre of University Extension

Business

BUSINESS POLICY
J. U. Joseph

This course covers the fields of policy making and administration. The approach is from the level of top management in order that management problems may be studied from an overall, rather than from a departmental, point of view. However, the course itself is intended for middle management and above.

The course emphasizes (1) diagnosing a company's situation with regard to both internal and external conditions; (2) determining objectives; (3) planning administrative, financial, production, and marketing strategies and tactics for achieving objectives; and (4) operating the organization according to a plan.

A major objective of the course is to develop a comprehensive approach to business problems.

TEXT: E. P. Learned, *Business Policy: Text and Cases,* Richard Irwin, 1965.

TIME: Mondays, 7:00-9:00 p.m., commencing September 22
PLACE: 216, Galbraith Building, St. George Campus
FEE: $85.00 — 25 sessions

This course may be taken as part of the Fellows' Programme in Banking.

COMMUNICATIONS
A. F. Collaco

The aim of this course is to increase the students' knowledge, understanding and skill in communicating effectively.

The concepts and processes of face-to-face communications, as well as communications in small and large groups will be examined in depth. The course will deal with the mechanics and problems of oral and written communications as well as the relationship between communications and behaviour. Some of the barriers to effective communications will be examined and some techniques will be developed to help in overcoming these barriers and in improving communication skills. Emphasis will be placed on practising these skills.

The course consists of three main topics or emphases: writing, speaking and listening.

TEXT: None

TIME: Tuesdays, 6:30-8:30 p.m., commencing September 23
Thursdays, 6:30-8:30 p.m., commencing September 25
PLACE: Tuesdays, 329, East Asian Studies, St. George Campus
Thursdays, 329, East Asian Studies, St. George Campus
FEE: $85.00 — 25 sessions

This course may be taken as part of the Manpower Development, the Fellows' Programme in Banking, and the Industrial Marketing Certificate Programmes.

HIGH SPEED DATA PROCESSING

W. Morgan
E. Schmid

This introduction to modern high speed data processing systems provides a general background on the use of stored program computers to solve business problems. The three major sections of the course are devoted to the discussion of data processing equipment, data processing systems and programming, and applications.

The section on equipment is a study of the principles and components of computers. The section on systems and programming introduces the principles of systems analysis, systems design and programming as applied to automatic data processing. The last section illustrates the application of data processing technology to specific business problems. The course terminates with a symposium in which representatives of manufacturing and other organizations active in this field in Canada are invited to participate.

TEXT: E. M. Awad, *Automatic Data Processing*, Prentice-Hall.

TIME: Tuesdays, 7:00-9:00 p.m., commencing October 7
          Wednesdays, 6:30-8:30 p.m., commencing October 8
PLACE: Tuesdays, 206, Electrical Building, St. George Campus
          Wednesdays, 248, Galbraith Building, St. George Campus
FEE: $60.00 — 20 sessions

THE EDITORIAL FUNCTION IN BOOK PUBLISHING

M. Jeanneret

The object of this course is to provide book editors with an opportunity for professional development. A wide variety of books will be considered. Discussion will be guided by a series of experts in various branches of book editing on subjects such as list-building, evaluating manuscripts, assisting authors in writing, revising, copy-editing, and seeing work through the press.

This is one in a series of professional development courses which the Division of Extension is offering in co-operation with the Canadian Book Publishers' Council.

Registration will be limited to 25 students.

PREREQUISITE: Experience in book editing is a requisite. A resume of professional background must accompany each application.

TEXT: A reading list will be provided.

TIME: Thursdays, 7:30-9:30 p.m., commencing October 9
PLACE: 119, Galbraith Building, St. George Campus
FEE: $75.00 — 10 sessions

INFORMATION AND COMMUNICATION SYSTEMS

R. N. Beattie

This course consists of lectures and discussions for managers and supervisors who are responsible for the design and control of systems and is to provide the information and communication services needed by business organizations. The search for the most economical and efficient uses of manual, mechanical, and

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automatic equipment for processing business data will be the main theme. Some of the topics studied will be office organization, paperwork simplification, records management, forms control, clerical work measurement, performance evaluation, and electronic computer applications.

A bibliography, including a choice of textbooks, will be supplied and each student will be required to design and pursue a programme of reading. There will be term assignments and a written examination.

Registration will be limited to 40 students.

TIME: Mondays, 7:30-9:30 p.m., commencing September 22
PLACE: 308, Galbraith Building, St. George Campus
FEE: $85.00 — 25 sessions

This course may be taken as part of the Administrative Management Society Certificate Programme.

INTERVIEWING AND COUNSELLING   *J. C. Chisholm*

This course is designed for those persons who are working as interviewers or counsellors and for those who view the interview as an important auxiliary skill required in their job. Suupervisors, managers, and personnel workers should find the skills gained in this course particularly useful.

Course content will include both theory and practice with emphasis on application. Students will be given the opportunity to practice these skills in the classroom setting through role playing, observation, and practice exercises. The types of interviews covered will be those commonly used in a business and industrial setting: i.e. employment, termination, corrective, promotion, appraisal and counselling.

Registration will be limited to 30 students.

TEXT: R. L. Kahn, C. F. Cannell, *The Dynamics of Interviewing,* Wiley and Sons, 1957.

TIME: Tuesdays, 7:30-9:30 p.m., commencing September 23
PLACE: 335, East Asian Studies, St. George Campus
FEE: $85.00 — 25 sessions

This course may be taken as part of the Manpower Development Certificate Programme.

LABOUR RELATIONS   *F. W. Murray*

This course is primarily for people in industry who now carry responsibilities for decisions in personnel administration, particularly where collective bargaining is a factor.

The topics covered will include the history of the trade union movement and labour legislation, particularly in Canada, with a more detailed examination of the Ontario Labour Relations Act and its procedures. Comparisons will be made with other provincial and federal legislation, highlighting recent legislative developments in the field. Negotiations, including conciliation

procedures and the administration of collective agreements including arbitration, will be covered together with a study of some of the more important portions of the collective agreement.

The sessions are of a work-session nature wherever practical in order to develop an understanding of the problems both union and management bring to the labour relations situation, and of the environment in which they operate.

TEXT: N. W. Chamberlain, J. W. Kuhn, *Collective Bargaining*, McGraw-Hill.

TIME: Mondays, 7:30-9:30 p.m., commencing September 22
PLACE: 108, Falconer Hall, St. George Campus
FEE: $85.00 — 25 sessions

This course may be taken as part of the Personnel-Industrial Relations Certificate Programme.

AN OVERVIEW OF PERSONNEL ADMINISTRATION   *L. Wevrick*

This course should prove useful to individuals who have just entered or are interested in entering the personnel field. Also, for individuals in supervisory positions, the course will provide an appreciation of the personnel department's role in a business organization.

As an introduction to the field of Personnel Administration, the course covers the major personnel activities by means of lectures, class discussions and analysis of case studies. Pertinent findings from the social sciences and human relations studies will be covered.

Topics to be covered include: the relationship of the personnel function to the rest of the organization; the personnel administrator's job in manning the operation — recruitment, selection, and placement; evaluating jobs and personnel —wage and salary administration, performance appraisal; training and developing people; communications — interviewing and counselling; implications of technological change — manpower planning.

Registration will be limited to 50 students.

TEXT: E. H. Schein, *Organizational Psychology*, Prentice-Hall, 1965.

TIME: Tuesdays, 6:00-8:00 p.m., commencing January 6
PLACE: 406, Carr Hall, St. George Campus
FEE: $45.00 —13 sessions

This course may be taken as part of the Manpower Development Certificate Programme.

THE PERSONNEL FUNCTION   *T. L. Bourk*

This course is designed to provide students with a general understanding of the activities and systems which comprise the personnel function of an organization. All aspects of personnel management will be explored with particular emphasis on relating personnel management principles, policies, and procedures to staff operational situations within the organization.

Topics will include: organization of personnel, leadership and communication, staffing the organization, employee benefits and personnel services, performance appraisal, training and development, wage and salary administration, government legislation, organization planning and research. This course normally interests people with responsibilities in the personnel administration area.

TEXTS: (1) J. W. Towle, S. H. Schoen, R. L. Hilgert, *Problems and Policies in Personnel Management, A Case Book,* Houghton-Mifflin, 1965. (2) W. L. French, *The Personnel Management Process: Human Resources Administration,* Houghton-Mifflin, 1964.

TIME: Wednesdays, 6:30-8:30 p.m., commencing September 24
PLACE: 406, Carr Hall, St. George Campus
FEE: $85.00 — 25 sessions

This course may be taken as part of the Personnel-Industrial Relations Certificate Programme.

PERSONNEL PRACTICES AND CONCEPTS FOR MANAGERS AND SUPERVISORS
W. Lennox

This course has been designed for those who have responsibilities in the management of an office or department thereof. It will also prove valuable in the development of those who may soon have such positions. (Graduates from the University's Certificate Course in Business usually will find this course most worthy in rounding out their Extension programme as it relates to business.)

This course is personnel oriented, dealing with administration as it affects people — it includes: the nature of management; the meaning of work; leadership and the process of supervision; recruitment methods and procedures; employee training and development; counselling techniques; employee motivation; discipline; union relations; job descriptions and evaluation; employee benefit programmes.

Some typical office personnel situations will be discussed by the class and some films will be shown to portray human relations problems involved in business. Extensive notes will be provided. There will be term assignments and a written examination.

Registration will be limited to 40 students.

TEXT: G. Strauss, L. Sayles. *Personnel-Human Problems in Management,* 2nd ed., Prentice-Hall.

TIME: Thursdays, 7:00-9:00 p.m., commencing September 25
PLACE: 252, Mechanical Building, St. George Campus
FEE: $85.00 — 25 sessions

This course may be taken as part of the Administrative Management Society Certificate Programme.

RETAIL MANAGEMENT
D. W. Hillhouse

This course is directed to retail executives and management people engaged in the distribution and service industries. The essential objective is to provide an up-to-date review of Canadian retailing. Special emphasis is placed on examining trends, and the problems associated with adapting present operations to the needs of the consumer in the future. Established retailing practice is examined against current management principles and techniques. Topical areas such as franchising and vending will be included in the programme which will be designed for student participation and group discussion.

PREREQUISITE: course "Marketing Management", or equivalent experience

TEXT: T.B.A.

TIME: Mondays, 7:00-9:00 p.m., commencing October 6
PLACE: 210, Electrical Building, St. George Campus
FEE: $85.00 — 25 sessions

STATISTICAL METHODS
V. Sawyer

This is an introductory course in modern statistical methods and in ways of making decisions under conditions of uncertainty. Topics include frequency series, correlation, time series analysis, elementary probability, sampling, statistical inference, and analysis of variance. No mathematics beyond high school algebra is required.

Registration will be limited to 30 students.

TEXT: J. E. Freund, F. J. Williams, *Elementary Business Statistics: The Modern Approach*, Prentice-Hall, 1964.

TIME: Thursdays, 7:30-9:30 p.m., commencing October 9
PLACE: 116, Galbraith Building, St. George Campus.
FEE: $50.00 — 20 sessions

STATISTICS AND INDIVIDUAL DIFFERENCES
L. Wevrick

This course is designed to give personnel staff a better understanding of the statistics involved in personnel management. It will also deal with the application of statistical techniques to problems in selection, evaluation and counselling. Topics to be covered are:

Graphical Display of Data
Descriptive Statistics
Sampling Techniques
Individual Differences
Assessment Techniques
Age and Sex Variables
Problems in Psychological Testing

TEXTS: (1) L. E. Tyler, *Tests and Measurements*, Prentice-Hall, 1963 (paperback). (2) P. B. Moroney, *Facts from Figures*, Pelican, 1964.

TIME: Tuesdays, 6:00-8:00 p.m., commencing September 23
PLACE: 406, Carr Hall, St. George Campus
FEE: $40.00 — 12 sessions

This course may be taken as part of the Manpower Development Certificate Programme.

WRITTEN COMMUNICATION IN BUSINESS   *R. N. Beattie*

This course consists of twenty lecture-workshop sessions, and is designed for supervisors who are required to write letters, memoranda, reports, instruction, and other business communications. The planning and writing of these is the principal subject of discussion and practice, although the course does include some review of English grammar, usage, and composition.

It is desirable for students to have Grade 13 English Composition, or its equivalent.

Registration will be limited to 32 students.

TEXTS: (1) J. Reid, R. Wendlinger, *Effective Letters: A Program for Self-Instruction,* McGraw-Hill, 1964. (2) H. W. Fowler, *A Dictionary of Modern English Usage,* Oxford University Press, 1965. Additional reading material and references will be supplied in class.

TIME: Thursdays, 7:30-9:30 p.m., commencing October 9
PLACE: 107, Galbraith Building, St. George Campus
FEE: $50.00 — 20 sessions

Communications

BUSINESS JOURNALISM   *J. I. Smith*

This course will consider the special activities involved in writing and editing business papers. The various types of business papers and their purposes and requirements will be examined. Participants will study editorial research, relations with businesses involved, handling of special issues and directories, and methods of measuring editorial effectiveness.

A business magazine will be created and printed as a special project.

Though it will deal with general problems of journalism, magazine make-up and editorial work, this course is intended for those with some background, either several years of experience in the field or a previous general course in journalism. Those without background are advised to take the course "Journalism" in the Fall session.

TEXT: None

TIME: Tuesdays, 7:00-9:00 p.m., commencing January 6
PLACE: 107, Galbraith Building, St. George Campus
FEE: $60.00 — 12 sessions

(Offered in co-operation with the Business Press Editors' Association)

COMMUNICATION AND DICTION   M. Thornburn
                                                    E. Tugman

Speech is the most important means of communication. Students in this course will be taught the fundamental sounds of the language, pronunciation and the building of a vocabulary for effective speaking. Instruction will also be given in breathing, voice projection and production of tone. Oral reading of poetry and prose selections will give every student the opportunity to develop his ability to express himself clearly and audibly.

> "To speak much is one thing,
> To speak well is another."
> > *Sophocles*

TEXT: None

TIME: Wednesdays, 8:00-9:30 p.m., commencing October 8
         Thursdays, 8:00-9:30 p.m., commencing October 9
PLACE: University College, St. George Campus
FEE: $60.00 — 20 sessions

HUMAN RELATIONS AND HUMAN ORGANIZATION   M. Wilson

Many people enter management from areas of technical specialty. Much of their training and experience has equipped them for dealing effectively with things, yet their new horizons involve a growing competence in managing people.

The purpose of this introductory level course is to provide participants with a means of developing their relationship skills. It is intended to help you learn to make practical improvements in the way you manage people.

In making practical improvements, the course assumes it is important to start from where you are. Consequently, while some lecture material and demonstrations may be introduced, discussion techniques will be used extensively. Operating in the informal atmosphere of several sub-groups, a resource person will help to intensify these group experiences and to make them more meaningful.

If you want to make better utilization of the human resources at your disposal, this course may help you. On the other hand, it cannot do so unless you are prepared to carry out a series of self-assigned experiments designed to test different approaches in your own setting.

TEXT: None

TIME: Wednesdays, 7:00-9:30 p.m., commencing October 8
PLACE: 335, East Asian Studies, St. George Campus
FEE: $100.00 — 20 sessions

This course may be taken as part of the Manpower Development Certificate Programme.

HUMAN POTENTIAL WORKSHOP   *M. Wilson*

This intermediate level workshop is a continuation of introductory level courses in the human resources series. It has grown out of a need expressed by those who have taken these courses for an avenue to explore their own uniquely personal potentialities, and for a place to experiment with practical steps toward further self-realization.

The workshop will operate in a wide variety of modes. The sessions will begin with a number of sub-groups focused on different facets of human behavior. As the situation changes, group activities will be modified by the participants themselves to meet newly perceived requirements.

For example, one sub-group will concern itself with the enhancement of leadership skills. As a member of that group, you will be expected to undertake a leadership role in some setting which will allow you to apply your developing leadership potential creatively. Some group members will be involved in the leadership of other courses in the human resources series as part of their total learning situation.

Participation is restricted to those who have already taken courses in the human resources series. Effective participation will require the application of learning to activities in both formal organizations and informal group settings, in order to foster the translation of insight into practical action.

TEXT: None

TIME: Mondays, 8:00-10:30 p.m., commencing October 6
PLACE: 335, East Asian Studies, St. George Campus
FEE: $100.00 — 20 sessions

INTERPERSONAL COMMUNICATIONS   *M. Wilson*

This introductory level course is intended to provide a learning situation in which you can become more aware of how you communicate with others, and better able to have deeper and more meaningful relationships.

Participants will be encouraged to experiment with new relationship patterns in their own personal and professional areas of interest, and to report on changes they observe in the communications which take place. No attempt will be made

to offer guidelines for effective human relations or worthwhile interpersonal communications because this will be a doing course rather than a knowing course. Progress will be measured by each individual in terms of the actual improvement you are able to make in communication with people who are important to you.

While some material will be presented for group consideration, sessions will consist largely of discussions between participants in small and large groups. Resource persons will be available to serve as catalysts to learning.

If you want to improve your communications with others, this course may help you. You will get most out of it if you are already aware of your own potential for effective and rewarding relations with others, and interested in realizing better interpersonal communications in your everyday business, professional and personal activities.

TEXT: None

TIME: Mondays, 6:30-9:00 p.m., commencing October 6
PLACE: 329, East Asian Studies, St. George Campus
FEE: $100.00 — 20 sessions

JOURNALISM   *W. W. Craig*

Practical emphasis on how to sell your writing efforts is the basis of this introductory course in the skill and art of creative writing. Article construction for newspapers, magazines, and company publications, along with other specialized writing, is examined. Lectures deal with various ways in which to improve writing, how to improve writing style, and how to market finished articles in a variety of ways. Sessions on words, grammar, parts of speech, figures of speech, sentences, and paragraphs are included. Also, interviewing, the place of opinion in writing, how to editorialize, and the role of the editor are considered.

Practical assignments plus a tour of a large metropolitan daily newspaper are included in the course.

TEXT: None

TIME: Mondays, 7:30-9:30 p.m., commencing September 22
PLACE: 405, Carr Hall, St. George Campus
FEE: $50.00 — 12 sessions

EFFECTIVE READING   *J. Hume*
                                                             P. Brennan
                                                             D. Jannaway

The volume of research being carried out today in various areas of specialization makes the task of keeping abreast of developments almost an impossibility. The purpose of this course is to help any interested person to read all types of material faster, more purposefully, and with greater comprehension. Various techniques for improving reading efficiency will be employed, including the use of such equipment as reading machines and laboratories.

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Students will be tested at the beginning and at the end of the course, and, throughout, will be individually counselled regarding their progress and problems.

TEXT: None

TIME: Mondays and Wednesdays, 7:30-9:30 p.m., commencing October 6
Tuesdays and Thursdays, 6:00-8:00 p.m., commencing October 7
Mondays and Wednesdays, 7:00-9:00 p.m., commencing January 5

PLACE: 47 Queen's Park, St. George Campus

FEE: $75.00 — 20 sessions

SPECIAL OFFER

Because the ability to read effectively is essential to obtaining maximum value from most of this Division's courses, we feel a responsibility in assisting adult students to equip themselves with effective reading skills. Therefore, we offer enrolment in the Effective Reading course at the reduced fee of $25.00 to persons who are taking other courses offered by the Business, Engineering, Nursing and Special Programmes Section. To qualify for this offer registrants must enrol concurrently in another of our full courses (20 or more sessions) or must have taken one during the previous academic year. Applicants must state the name(s) of such other course(s) on their application forms.

EFFECTIVE SPEECH COMMUNICATION FOR BUSINESS PEOPLE
H. Tucker

Good speech communication requires satisfactory understanding in any conversational or speaker-listener exchange.

The first term of these classes will be devoted to improving skills in listening and speaking, oral reading and organization of ideas. Voice control, personal composure, forethought and control in speech situations will be stressed as basic to good communication. The second term will deal with participation in committees, delivery of reports, and performance on public speaking occasions. There will be training in chairmanship, conduct of meetings, impromptu speaking and parliamentary procedure.

TEXTS: Optional texts will be recommended.

TIME: Tuesdays, 6:30-8:30 p.m., commencing October 7
(for those without previous training)
Wednesdays, 6:30-8:30 p.m., commencing October 8
(for those seeking advanced training and speech practice)

PLACE: 7, Victoria College, 73 Queen's Park, St. George Campus

FEE: $75.00 — 20 sessions

WRITING FOR MAGAZINES
F. Rasky

If you want to make money by writing for magazines, perhaps these sessions will help you. This course is not for those who wish to learn basic English composition; nor is it for aesthetes interested only in improving their literary style. Rather, it teaches the practical technique of writing saleable articles for business journals, professional publications and mass-circulation magazines.

Students must be prepared to write five assignments.

After each session, the class usually gathers with the lecturer to discuss their individual writing problems over a sociable cup of coffee.

Topics include:

How to generate ideas for saleable articles
How to write a brief outline to the articles editor
How to conduct your research
How to interview your subject
The basic technique of the mass-magazine article
The special technique of the biographical profile, the scholarly review, the
    how-to-do-it article, the dramatic-narrative article
How to ghost-write the as-told-to article
How to write catchy titles
How to slant articles for your market
How to merchandise your finished article for the editor

TEXT: None

TIME: Wednesdays, 8:00-10:00 p.m., commencing October 8
PLACE: 405, Carr Hall, St. George Campus
FEE: $70.00 — 20 sessions

WRITING WORKSHOP
W. Forbes

Print is the slowest form of communication, but most businesses and professions depend on print in some form for most of their communications. This course is designed to improve communications skills and to develop functional writing — writing for use. It will concentrate on the elements in a printed sentence that make people read — in news stories, fiction, reports, memoranda, general business and collection letters, press releases and professional and technical articles. It will suggest means of conducting all kinds of business interviews for report writing and their translation to simple, understandable, acceptable English.

The course will consist of lectures and workshop sessions with visiting experts, joint critiques and individual help.

Registration will be limited.

TEXT: A suggested reading list will be provided.

TIME: Wednesdays, 7:00-9:00 p.m., commencing October 29
PLACE: 104, University College, St. George Campus
FEE: $60.00 — 12 sessions

WRITTEN COMMUNICATION
H. B. Henderson

This is a course in writing correct and effective English. Its aim is twofold: first, to present English as a living, working language, and, second, to help those interested to use it with accuracy, precision, and confidence. The fundamental rules of punctuation and grammar will be studied, and attention given to effective word usage, sentence structure and paragraphing. Practice in writing short essays, articles, and letters (but not commercial communications) will be given in class, with emphasis on the effective use of words and correctness of form. Consideration will be given to proper pronunciation and clear enunciation of words, but the course deals chiefly with written English.

All students in this course should have a good dictionary. One ranging in price from about $5.00 to $9.00 is recommended. Because of its Canadian content *Senior Canadian Dictionary* (W. J. Gage) has special value.

TEXT: C. B. Spotts, *Fundamentals of Present-Day English (Form "A", Second Series)*, Holt, Rinehart and Winston.

TIME: Mondays, 8:00-9:30 p.m., commencing October 6
PLACE: University College, St. George Campus
FEE: $50.00 — 20 sessions

Current Affairs

THE CONTEMPORARY SCENE

This series of lecture-discussions has been arranged in co-operation with the York County Branch of the University Women's Club. Under the guidance of distinguished leaders in Canadian thought, it is hoped to provide members of the community with a stimulating opportunity to consider matters relevant to Canadian interests and concerns.

An outline of topics and speakers follows:

October 6	Mr. Knowlton Nash	Current Affairs in Canada and the World
November 3	Dr. A. D. Tushingham	Canadian Archaeology at Home and Abroad
December 1	Mr. Richard Needham	Men, Women and Canadians
January 5	Dr. Helen Hogg	Contemporary Astronomy
February 2	Dr. Robert McClure	Western Medicine in Eastern Lands
March 2	Dr. A. D. Misener	The Great Lakes and Their Environment

TEXT: None

TIME: Mondays, 8:00-9:30 p.m., commencing October 6
PLACE: Richmond Hill Public Library, Richmond Hill
FEE: $10.00 — 6 sessions

STUDIES OF CONTEMPORARY URBAN AND REGIONAL PLANNING

A. J. Dakin

Examples of different levels of physical planning in urban and regional settings will be examined in this course. Participants will explore the reasons for undertaking planning and the social, economic, and political conditions with which planning is concerned. Comparative studies of planning from various countries will be presented.

This course is intended for persons who have a professional interest in the subject area. Informed laymen will also find it useful.

TEXT: A reading list will be provided.

TIME: Mondays, 7:30-9:30 p.m., commencing October 6
PLACE: 403, Carr Hall, St. George Campus
FEE: $55.00 — 10 sessions

EUROPE'S PROTECTIVE WALL

J. Gellner

This course will explore political, social, and economic conditions in present-day Austria, Hungary, Poland and Czechoslovakia — the countries between Germany and Russia. The study will begin with an examination of the common background of these countries up to the middle of the nineteenth century, move to a consideration of the changes of the fateful last thirty-five years, and conclude with an assessment of the current situation and the likely outcome of common spiritual trends (liberalism, catholicism, and nationalism) which are working toward the renewal of previous unity.

TEXT: A reading list will be provided.

TIME: Thursdays, 8:00-9:30 p.m., commencing January 15
PLACE: University College, St. George Campus
FEE: $35.00 — 12 sessions

ISLAM IN THE CONTEMPORARY WORLD

M. Q. Baig

One of the features of our pluralistic society is the resurgence of interest in different cultures and religions. Islam is not only a major religious tradition of the world, but it has also contributed to the healthy growth of man's civilization. It is becoming increasingly significant in our western world. This course has been arranged to provide exact and up-to-date information by one who speaks with authority from within the fold of Islam on this influential and vital element in the present-day world.

TEXT: None

TIME: Tuesdays, 7:30-9:00 p.m., commencing September 30
PLACE: University College, St. George Campus
FEE: $35.00 — 12 sessions

ISSUES IN EDUCATION

A. Thomas
Course Director

Education has become a central institution in Canada. The power it exercises rivals that of the medieval church, and sometimes the contemporary state. Where does this power reside — with students, with faculty, with administration? At what point do, or should these various factors become self-determining? What is the new role of the public with respect to the governing of education? Towards what or whose goals should it be directed? Does education now have its own goals? This course will be of interest to all citizens who are concerned with and interested in education, but it will be of most value to those who are presently educators or educational administrators.

TEXT: A reading list will be provided.

TIME: Mondays, 7:30-9:30 p.m., commencing October 6
PLACE: Innis College, St. George Campus
FEE: $40.00 — 10 sessions

JAPAN TODAY

K. Tsuruta
Course Director

Participants in this course will explore various aspects of the culture of enigmatic and fascinating Japan. Four scholars of Japanese studies, all from the University, will lead the various sessions.

Last year, the gross national product of Japan placed her second only to the United States as an industrial power. And, yet, the country still comfortably accommodates a traditional past as evidenced in the Noh and Kabuki Theatres, Haiku and the Cult of Tea. Japan has long been combining seemingly irreconcilable cultural elements (for example, Western values with the values of Shintoism, Confucianism, Taoism and Buddhism) and appears to thrive on the harmony which it creates from diversity. It is very appropriate that they have entitled their coming Expo '70 in Osaka "Progress And Harmony For Mankind".

At a time when the world confronts diverse clashing values, it is useful to look more carefully into the inner workings of the mind of our neighbour Japan. This course will attempt to do this through examining the hybrid nature of the culture, the imitation and creativity of the Japanese, and their identity problem.

A tentative outline of the programme follows:

Peculiarities of the Japanese Culture
History of the Japanese People
The Social Structure
The Economic Structure
Poetry — Haiku and Tanka
Comic Traditions
The Noh and Kabuki Theatres
The Japanese Character as Revealed by the Language
The Work of Contemporary Japanese Novelists
The Japanese Search for Identity

Registration in each class will be limited. Persons interested in a Study Tour of Japan are invited to write for information.

TEXT: A reading list will be provided.

TIME: Wednesdays, 7:00-9:00 p.m., September 24 to November 26
          Wednesdays, 7:00-9:00 p.m., January 14 to March 18
          Three days (full time) May 8, 9, 10
PLACE: 404, Carr Hall, St. George Campus
FEE: $50.00 — 10 sessions (or 3 days full time)

JAPAN TODAY FOR BUSINESSMEN

K. Tsuruta
Course Director

This course is intended for business orientated people who will be visiting Japan in the near future and would like to have some minimal understanding of the country, its economy, its method of doing business, and its business and economic relationships with Canada.

The course itself is very similar to that entitled "Japan Today". In this course there will be no sessions on poetry or on contemporary Japanese novelists. These periods will be replaced by sessions on Japanese methods of conducting business, and economic and business relations with Canada.

Enrolment in each class will be limited. Persons interested in a Study Tour of Japan are invited to write for information.

TEXT: None

TIME: Wednesdays, 7:00-9:00 p.m., September 24 to November 26
          Wednesdays, 7:00-9:00 p.m., January 14 to March 18
          Three days (full time) May 8, 9, 10
PLACE: 404, Carr Hall, St. George Campus
FEE: $50.00 — 10 sessions (or 3 days full time)

JERUSALEM: TOMORROW THROUGH THE EYES OF YESTERDAY

S. E. Rosenberg

This course will offer an examination of the significance of the City of Jerusalem in world history, and to the major religious faiths. It will provide a further inquiry into the contribution made by the people for whom Jerusalem is a Holy City, and into the reason why Jerusalem is the symbol of the most profound kind of revolution through which the world is now passing — a revolution which includes cultural, religious, economic, political and international elements.

TEXT: None

TIME: Wednesdays, 2:00-3:30 p.m., commencing October 8
PLACE: 47 Queen's Park, St. George Campus
FEE: $35.00 — 10 sessions

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MAJOR ISSUES IN THE EMERGING NATIONS OF AFRICA
A. K. Ingutia

The newly independent nations of Africa are a veritable laboratory for the analysis of the processes of political decisions affecting the metropolitan power blocks. The study of contemporary Africa is, therefore, important, not only for the expansion of one's knowledge about the emerging preliterate peoples, but, also, for the increase of one's understanding of the actions being taken by the contemporary African nations.

The course will begin with a review of early African history, leading to an examination of traditional African culture as distinct from Western culture. Then the class will turn its attention to a consideration of major issues in the emerging nations of Africa, such as: the marginal races, the white races, race and ethnic relations and the Asian problem in East Africa. A study of African Independence, Pan-Africanism or Communism, and the significant and complex question of African Personality will conclude the programme.

Films illustrating social and political change in Africa and the contrast of the Afro-American and African Revolutions will be shown. A tape recording of the play "Emergence of the Social Class" will also be presented.

TEXT: None

TIME: Thursdays, 8:00-9:30 p.m., commencing October 9
PLACE: University College, St. George Campus
FEE: $50.00 — 20 sessions

MAN AND HIS GOVERNMENT
R. N. Bosada

This is an introductory course in political science proceeding from a study of the origins of the state to a discussion of contemporary government and politics and the relation of the individual to them.

Forms of government, public opinion, political parties, international relations, law, governmental power, nationalism, and war and conflict will be examined. The identity of Canada as a nation and the unique political problems, both national and international, together with the nation's adherence to parliamentary democracy will be studied in relation to course content.

TEXT: None

TIME: Tuesdays, 8:00-9:30 p.m., commencing October 7
PLACE: University College, St. George Campus
FEE: $50.00 — 20 sessions

SOCIAL WELFARE SERVICES AND THE VOLUNTEER
S. J. Albert

This course is intended for volunteers (or potential volunteers) working in the social welfare field in a wide variety of settings. A number of areas of interest will be covered beginning with a focus on acquainting participants with the broad range of services available in our communities. One of the purposes of the course is to help volunteers see the larger context within which they operate in a particular setting. The content will also be designed to stimulate interest in current issues affecting welfare services, such as financing and public versus private auspices. Some time will be spent examining how our ideas of welfare are changing.

Throughout the course there will be emphasis on helping volunteers to clarify their own thinking and feelings about their roles as volunteers.

Sessions will be based upon both presentation by the instructor and active participation by class members.

Registration will be limited to 30 students.

TEXT: A reading list will be provided.

TIME: Tuesdays, 7:00-9:00 p.m., commencing September 23
PLACE: 310, School of Social Work, St. George Campus
FEE: $50.00 — 12 sessions

URBAN AND REGIONAL INFORMATION SYSTEMS
H. C. Campbell

A growing number of public and private agencies in Ontario are investigating modern methods of information handling in urban and regional affairs. A number of urban information systems are being developed on a municipal, provincial, and national basis, and their scope and planning involve people in many different disciplines.

This course is designed to aid those responsible for administrative operations and policy decisions concerning information systems in Canada and to familiarize them with methods and techniques, including computer processes, which are of value.

Four major areas which will be considered are: the value and use of urban information systems, the operation of existing urban information systems in Canada and abroad, methods and techniques in the handling of urban information, and the design of information systems for Canadian use.

This course is intended for municipal, provincial and other policy-makers who are concerned with the establishment and operation of urban information and data services.

REFERENCES: (1) E. F. R. Hearle, et al., *A Data Processing System for State and Local Government*, Prentice-Hall. (2) R. M. Hayes, et al., *Information Storage and Retrieval: Tools, Elements, Theories*, Wiley and Sons. (3) Science Council, *Scientific and Technical Information in Canada*, Queen's Printer, Ottawa, 1969.

TIME: Mondays, 7:00-9:00 p.m., commencing September 15
PLACE: 304, Galbraith Building, St. George Campus
FEE: $65.00 — 12 sessions

URBAN RENEWAL AND HOUSING PROBLEMS
H. Blumenfeld

Participants in this course will explore various methods of urban renewal and approaches to the problem which are currently being undertaken. Policies for rehabilitation and conservation of urban areas will be discussed. Specific examples of renewal will be presented for examination in relation to planning theory and practice. Examples of renewal from various countries will be included.

This course is intended for persons who have a professional interest in the subject area. Informed laymen will also find it useful.

TEXT: A reading list will be provided.

TIME: Mondays, 7:30-9:30 p.m., commencing January 12
PLACE: 403, Carr Hall, St. George Campus
FEE: $55.00 — 10 sessions

THE YEARS OF CRISIS
P. Silverman

This course will deal primarily with the post-Second World War period, and will, for the most part, be confined to "crisis areas".

Specific areas of conflict will be examined in detail to explore the reasons for the conflicts and the possible future outcomes. Such areas will include Israel and the Middle East, Vietnam, South Africa and Rhodesia, and Central and South America. Some time will be spent examining American foreign policy, particularly in the Western hemisphere and Asia. Time will also be devoted to a broad look at the 1945-69 period with reference to the decline of Britain's rôle in the Far and Middle East.

Some discussion on revolutionary and counter-revolutionary warfare will also be undertaken.

REFERENCE TEXTS:

★ South America:	*The Diary of Che Guevara*
Guerilla War:	B. Crozier, *The Rebels,* Beacom Press
Vietnam:	G. D. Halberstrom, *The Making of a Quagmire,* Random House
Far East:	L. W. Pye, *Guerilla Communism in Malaya,* Princeton University Press
★ British Foreign Policy:	W. A. Williams, *The Tragedy of American Diplomacy*
Middle East:	Jan and David Kimche, *Both Sides of the Hill*
★ Algeria:	E. A. Kelly, *Lost Soldiers*
★ Vietnam:	W. R. Carson, *The Betrayal*
	R. S. Churchill, *The 6-Day War*

★ (available in paperback)

TIME: Thursdays, 8:00-9:30 p.m., commencing October 9
PLACE: University College, St. George Campus
FEE: $50.00 — 20 sessions

Economics and Finance

ACCOUNTING FUNDAMENTALS FOR NON-FINANCIAL MANAGERS

J. Howard
W. A. MacFadden

This course is designed specifically to convey fundamental concepts, principles, and practices of finance and accounting to operating managers. The course begins with sessions on the basic principles of bookkeeping and accounting and goes on to review financial statement analysis, cost accounting and methods of finance. The lecture-discussion method concentrates on the influence which these financial and accounting concepts have on the interpretation of results, on planning, and decision making.

Registration will be limited to 50 students.

TEXT: W. B. Meigs, C. E. Johnson, J. D. Blazouske, *Accounting, The Basis for Business Decisions*, McGraw-Hill, 1964.

TIME: Mondays, 7:00-9:00 p.m., commencing October 6
        Tuesdays, 8:00-10:00 p.m., commencing October 7
PLACE: Mondays, Erindale Campus
        Tuesdays, 204, Galbraith Building, St. George Campus
FEE: $60.00 — 20 sessions

THE BANKER AND SOCIETY

G. Wheeler
S. Sarpkaya

This course provides an introduction to the roles which finance and financial markets play in our society and shows where banks fit into the financial system. It covers the basic functions of the financial intermediaries with special emphasis on various aspects of competition for the flow of savings and for opportunities. The financial requirements of businesses, households and governments are presented through lectures, discussions and case studies while pointing out the facilities and services the banks offer to meet them. Banking will be shown as a tool in many areas of financial relations in society, while stressing the role of banks in the community. Active participation by students is encouraged through discussion of current financial problems and illustration of pertinent financial publications.

Registration will be limited to 40 students per class.

TEXT: S. Sarpkaya, *The Banker and Society*, Institute of Canadian Bankers, 1968.

TIME: Mondays, 6:30-8:30 p.m., commencing September 22
        Tuesdays, 7:00-9:00 p.m., commencing September 23
        Wednesdays, 7:00-9:00 p.m., commencing September 24
        Thursdays, 7:00-9:00 p.m., commencing September 25

PLACE: Mondays, 244, Galbraith Building, St. George Campus
Tuesdays, 221, Galbraith Building, St. George Campus
Wednesdays, C, Faculty of Law, St. George Campus
Thursdays, 221, Galbraith Building, St. George Campus
FEE: $85.00 — 25 sessions

This course may be taken as part of the Fellows' Programme in Banking.

BUDGETARY CONTROLS
W. G. Peaker

This course will include the study of the nature and purpose of budgets; benefits to be gained and disadvantages to be avoided. Types of budgets will include those used for sales or revenue, purchases or production costs, selling expenses, general and administrative expenses, other expenses, cash and capital expenditures. Preparation of budgets, including delegation of responsibility and organization, will be discussed as will methods of analysis of company budgets. Case studies will be employed.

TEXT: G. A. Welsch, *Budgeting: Profit Planning and Control,* Prentice-Hall, 1964.

TIME: Mondays, 6:00-8:00 p.m., commencing October 6
PLACE: 116, Galbraith Building, St. George Campus
FEE: $40.00 — 10 sessions

This course may be taken as part of the Industrial Marketing Certificate Programme.

BUSINESS AND PERSONAL FINANCE
F. G. Bowyer

This is a course that will be of special interest to those working in financial institutions.

Areas of examination relating to business finance will be: sources of funds, both long and short term, in relation to need for funds in relation to risk implications as seen from both lender and borrower viewpoints; forecasting of finance requirements. Case studies will be used extensively.

Personal finance studies will consider the household as a socio-economic organization treating such areas as: analysis of current operations; budgeting; investments in property, education, stocks; equipping a household; protection through life insurance, pensions, wills, estate planning.

TEXTS: (1) P. Hunt, C. M. Williams, G. Donaldson, *Basic Business Finance: Texts and Cases,* Richard Irwin, 1961. (2) T.B.A.

TIME: Tuesdays, 7:00-9:00 p.m., commencing September 23
PLACE: 314, Galbraith Building, St. George Campus
FEE: $85.00 — 25 sessions

This course may be taken as part of the Fellows' Programme in Banking.

BUSINESS TAXATION
J. R. Hutchinson

This course is designed to give the executive an understanding of those aspects of taxation which will frequently confront him when making business decisions. Typical items covered are: amalgamations, depreciation policy, dividend policy, etc.

As well as executives, this course should be of particular interest to trust company trainees and life underwriters. It should also be useful to chartered accountants and lawyers who wish to become more familiar with Canadian tax law.

Because of the likelihood of major tax reforms in Canada in the near future, these proposed reforms will be discussed during the course. The recommendations of the "Carter Report" will also be considered.

The major topics are listed below:

Corporation Income Tax
Depreciation
Arms Length Transactions
Purchase and Sale, Amalgamation of Business
Stock Options, Pension Plans, Profit Sharing Plans
Capital Gains
Gift Tax
Succession Duties and the Estate Tax Act
Trends in Taxation

TEXT: None

TIME: Wednesdays, 7:30-9:30 p.m., commencing September 24
PLACE: 316, Galbraith Building, St. George Campus
FEE: $70.00 — 25 sessions

THE CANADIAN CAPITAL MARKET
P. A. T. Campbell

The purpose of this course is to examine the economic purpose and operational features of the various markets that combine to form the Canadian capital market. These markets include the money, bond, mortgage, stock and foreign exchange markets. The Euro-Dollar Deposit and Euro-Dollar Bond markets which integrate various national capital markets are examined as well. The evolution of the international monetary system is considered in detail. The uses to which Canada's monetary authorities put the Canadian capital market to further the attainment of government economic policy objectives are continuing themes. The examination of the Canadian capital market will take place in a continuous contemporary setting.

TEXT: None

TIME: Wednesdays, 6:30-8:30 p.m., commencing October 8
PLACE: 220, Galbraith Building, St. George Campus
FEE: $75.00 — 20 sessions

APPLIED ECONOMIC ANALYSIS

H. A. Marr

This course is intended for engineers and others whose responsibilities have ceased to be purely technical in nature and have come to include the measurement and analysis of the economic influences which affect the fortunes of a business enterprise.

The course is based on micro-economic theory: the theory of the firm. It does not attempt to be a rigorous treatment of the theory, but rather seeks to show, by use of theoretically derived relationships, what information is important and how it can be organized into economic data of use in the decision-making side of management.

This is achieved by devoting the major emphasis to the development and application of commonly used methods of economic analysis. Time series and cross-section analysis, demand analysis and economic modeling are typical of the techniques developed. They are applied to problems of marketing strategy, forecasting and the development of optimization criteria.

A few of the most frequently used statistical techniques such as regression analysis will be introduced to the extent required to facilitate data handling.

The course is intended for those who must use some of the techniques of economics and related fields as a management tool. As such, it covers topics which are more rigorously dealt with in other courses designed for students of business administration statistics and economics.

TEXT: T.B.A.

TIME: Wednesdays, 7:00-9:00 p.m., commencing September 24
PLACE: D, Teefy Hall, St. George Campus
FEE: $90.00 — 25 sessions

ECONOMICS — AN INTRODUCTION

J. I. McDonald
W. H. Merritt

The elements of economic theory will be developed and illustrated with reference to contemporary economic problems.

Lectures will include discussion of the following:
How are prices determined?
What is the national income and why is its growth so important?
What is at the root of the periodic crisis in international trade?
What does the supply of money have to do with inflation?

Registration will be limited to 40 students per class.

TEXT: P. A. Samuelson, A. Scott, *Economics — An Introductory Analysis,* McGraw-Hill, 1968.

TIME: Tuesdays, 7:00-9:00 p.m., commencing September 23
        Thursdays 6:00-8:00 p.m., commencing September 25
PLACE: Tuesdays, 403, Galbraith Building, St. George Campus
        Thursdays, 405, Carr Hall, St. George Campus
FEE: $85.00 — 25 sessions

This course may be taken as part of the Personnel-Industrial Relations, the Fellows' Programme in Banking, and the Industrial Marketing Certificate Programmes.

THE ECONOMICS OF LABOUR RELATIONS   *J. I. Stewart*

This course analyses the major economic causes and effects of the process of collective bargaining as required by various Labor Relations Acts in Canada. Some of the topics to be discussed are:

Economic Philosophy of the Relevant Legislation
Nature of the Labour Market
Determination of Wages
Productivity, Wages and Prices
Economics of Wage and Benefit Proposals

PREREQUISITE: courses "Economics" and "Labour Relations"

TEXTS: (1) H. D. Woods, S. Ostry, *Labour Policy & Labour Economics in Canada,* MacMillan Co., (paperback). (2) W. G. Bowen, *Labour and the National Economy,* Norton Co., 1965 (paperback).

TIME: Tuesdays, 6:00-8:00 p.m., commencing September 23
PLACE: 216, Galbraith Building, St. George Campus
FEE: $85.00 — 25 sessions

This course may be taken as part of the Personnel-Industrial Relations Certificate Programme.

ENGINEERING ECONOMICS   *W. B. Magyar*

This course is designed for those personnel from the chemical and resource industries who are interested in acquiring a broad knowledge of the factors involved and the mechanisms used to evaluate business projects from an economics standpoint. The student will gain a broad understanding of the type of approach and information necessary for such evaluations. As well as being intended for those directly engaged in engineering economics, it will appeal to engineers in manufacturing plants concerned with the economics of revamping process facilities and to those in R & D concerned with evaluation of their research projects.

PREREQUISITE: A university degree in chemistry; chemical, mining or metallurgical engineering; or other disciplines engaged in engineering economics.

TEXT: R. A. Anthony, *Management Accounting,* Richard Irwin.

TIME: Mondays, 7:00-9:00 p.m., commencing September 22
PLACE: D, Teefy Hall, St. George Campus
FEE: $95.00 — 25 sessions

(Offered in co-operation with the Chemical Institute of Canada)

FINANCIAL ANALYSIS AND CONTROL   *M. H. Cochrane*
                                         J. G. Haag

The purpose of this course is to give those business people with some knowledge of accounting a greater understanding of the problems involved in the analysis and interpretation of financial statements and the techniques of financial control.

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The area of financial analysis will be examined with consideration of such topics as: generally accepted accounting concepts; underlying assumptions, composition, and limitations of financial statements; interpretation of financial statements; the concept of fund flows; determinates of fund needs; the analysis of corporate statements with a view to evaluation and problem isolation and solution.

Control aspects to be considered are: costs — direct, indirect, managed, committed; budgeting — fixed, variable; analysis of variances; and appraisal of capital expenditures. Attention will be given to the relationship between control, motivation and performance.

TEXT: T.B.A.

TIME: Mondays, 6:00-8:00 p.m., commencing September 22
PLACE: 319, Galbraith Building, St. George Campus
         404, Galbraith Building, St. George Campus
FEE: $85.00 — 25 sessions

This course may be taken as part of the Fellows' Programme in Banking.

GOING PUBLIC — WHY, WHEN AND HOW

E. Batler
Course Director

During the last few years, the number of companies that have gone public by distributing their shares through primary offerings has increased several times over because of the great receptivity of the public for new unlisted industrials traded on an over-the-counter basis. More and more companies are obtaining additional capital via the public route. Also, for the first time, new companies without previous operating records are finding that going public is the easiest way to raise substantial amounts of venture capital for new enterprises in new fields.

This course is to provide the management of companies considering a public issue, with background and knowledge to assist them in their decision. In addition to an analysis of the pros and cons of going public and the mechanics of the process, several case histories will be considered. These case studies will be handled by the senior management or underwriters of companies that went public in the past. The purpose of these case studies will be to view in retrospect the problems and benefits of going public.

Registration will be limited to 30 students.

TEXT: None

TIME: Thursdays, 7:30-9:30 p.m., commencing September 25
PLACE: 406, Carr Hall, St. George Campus
FEE: $125.00 — 10 sessions

MANAGERIAL ECONOMICS

J. I. Stewart

This course is designed to consider how economic theory can be used in making decisions and, where relevant, to correlate or contrast such theory with accounting practice. Topics to be discussed include:

Profits and Managerial Decision
Demand Analysis
Cost Analysis
Pricing Policy
Sales Promotion
Capital Budgeting

TEXT: M. R. Colberg, D. R. Forbush, W. C. Whitaker, *Business Economics, Principles and Cases,* Richard Irwin, 1964.

TIME: Thursdays, 8:15-10:00 p.m., commencing January 8
PLACE: 305, Galbraith Building, St. George Campus
FEE: $40.00 —12 sessions

Education

CREATING THE LEARNING ENVIRONMENT

R. Wiele
Course Director

Educators and administrators who are responsible for arranging learning opportunities in both formal and informal situations will find this short, intensive workshop useful. Its purpose is to explore the ways in which an environment conducive to learning can be created, and to discover how communication between the teacher and the learner can be improved.

Included in the workshop will be a study of the essential components in a learning environment, and an assessment of the effect of educational technology and physical facilities upon the emotional climate.

In addition, the following topics will be related to the teaching-learning process: educational media, communications theory and practice, the experience of art, and group behaviour.

Participants must be prepared to do reading in advance and to take part in assignments during the workshop.

Registration will be limited to 30 students.

TEXT: None

TIME: Three days (full time) November 12, 13, 14
PLACE: St. Michael's College, St. George Campus
FEE: $100.00

Engineering and Science

AIR CONDITIONING ENGINEERING   *F. C. Hooper*

This is an undergraduate level course in the fundamentals of heating and air conditioning, covering the basic thermodynamics, refrigeration, psychrometry, combustion, heat transfer and fluid mechanics required for an understanding of the subject. Design procedures, and methods of solution of typical heat load, heating, ventilating and air conditioning problems are discussed.

PRINCIPAL REFERENCE: ASHRAE Guide

TIME: Mondays, 7:30-9:30 p.m., commencing October 6
PLACE: 107, Galbraith Building, St. George Campus
FEE: $95.00 — 20 sessions

AIRPHOTO INTERPRETATION AND   *S. J. G. Bird*
REMOTE SENSING

This course is designed for personnel having degrees or backgrounds in the fields of engineering, geology, planning, forestry or agriculture.

The following topics will be discussed:

Principles and techniques of airphoto interpretation, applicable to the identification of soils and rocks; photogeologic interpretation of sedimentary, igneous and metamorphic rock structures; principles and uses of colour and infrared colour photography, spectral slicing, infrared scanning imagery and radar imagery; applications of the use of all types of airphotos and imagery to the location and design of highways, powerlines, pipelines, flood control structures, damsites, mineral exploration and site selection; land capability and resource inventory studies, interpretation of land use, development trends by comparison of airphotos taken in different years; forestry and agriculture applications, including diseased vegetation detection and the ARDA Classification System from airphotos.

A large number of case studies will be presented in this course not only from all parts of Canada, but also from the Bahamas and the Fiji Islands.

Registration will be limited to 40 students.

TEXT: S. J. G. Bird, *Air Photo Interpretation of Soils and Rocks* (available for purchase in the classroom).

REFERENCE: R. N. Colwell, *Manual of Photo Interpretation,* American Society of Photogrammetry, 1960.

TIME: Mondays, 7:00-10:00 p.m., commencing September 22
PLACE: 303, Galbraith Building, St. George Campus
FEE: $150.00 — 25 sessions

ASTRONOMY I

H. C. King

This is a series of lectures of a popular nature for which no mathematical knowledge is required. It is intended to introduce the ordinary person to modern ideas about the nature, content and extent of the astronomical universe. The first term will be concerned with the main aspects of the celestial sphere, geocentric motions of bodies in space, telescopes and other methods of observation, and the study of the solar system. The second term will be devoted to a study of stars, interstellar material and stellar associations, and to a description of the universe of galaxies.

TEXT: None

TIME: Mondays, 8:00-9:30 p.m., commencing October 27
PLACE: Lecture Room, McLaughlin Planetarium
FEE: $65.00 — 20 sessions

ASTRONOMY II

H. C. King
T. Clarke

This course is an extension of the Astronomy I and/or History of Cosmology courses. The aim is to explore, in greater depth than is possible in an introductory course, a number of aspects of modern astronomy. Some of the topics will be: the nature of light, the optical principles of telescopes, stars with special characteristics, stellar evolution, stellar populations, radio and radar astronomy, x-ray and infrared astronomy, relativity, and modern ideas in cosmology.

Classroom discussion will be encouraged.

PREREQUISITE: Students will be expected to have a good general knowledge of descriptive astronomy, such as may be acquired in Astronomy I or History of Cosmology.

TEXT: None

TIME: Thursdays, 8:00-9:30 p.m., commencing October 9
PLACE: Lecture Room, McLaughlin Planetarium
FEE: $45.00 — 15 sessions

AUTOMATIC CONTROL THEORY

E. J. Davison

This course will be a survey of some of the recent advances in modern automatic control theory. A basic knowledge of automatic control theory and differential equations will be assumed. Topics discussed will be matrix theory, phase-space representation, linear control theory, adaptive control, lyapunor function theory, stability theory, calculus of variations, dynamic programming, Pontryagin's Principle, and numerical methods of optimal control.

TEXT: None

TIME: Thursdays, 6:30-8:30 p.m., commencing October 9
PLACE: 243, Galbraith Building, St. George Campus
FEE: $95.00 — 20 sessions

RECENT ADVANCES IN BIOLOGY
R. Pakula

The history of science is characterized by sudden spurts of progress which frequently occur following the merger of once separated disciplines. The merger of genetics, biochemistry and biophysics gave rise to a new branch of science — Molecular Biology.

This very vigorous discipline deals with the structure and functions of such important macromolecules as nucleic acids and proteins, with the nature of genetic information and with the transfer of this information.

The aim of this course is to introduce the layman to the recent discoveries in biology and to help him understand the modern ideas about the nature of life itself.

Demonstrations will illustrate the material covered by the lectures.

TEXT: None

TIME: Tuesdays, 7:30-9:00 p.m., commencing October 7
PLACE: 103, School of Hygiene, St. George Campus
FEE: $85.00 — 20 sessions (includes laboratory fee)

CALCULUS FOR ENGINEERS
D. S. Scott

This course is to serve as a review of elementary calculus and differential equations for those with little or no knowledge of calculus. Lectures will be devoted both to theory and problems. Among the topics to be covered are differentiation, integration, maxima and minima, multiple integrals, Taylor series, and elementary first and second order differential equations, including illustrations of their physical applications.

TEXT: F. Ayres Jr., *Calculus,* Schaum Publishing, 1950.

TIME: Mondays, 7:00-9:00 p.m., commencing September 22
PLACE: 310, Mechanical Building, St. George Campus
FEE: $95.00 — 25 sessions .

(Offered in co-operation with the Association of Professional Engineers of Ontario)

COMBUSTION, FUELS AND
HEAT POWER CONVERSION METHODS
A. B. Allan
Course Director

This course is designed to give a comprehensive and authoritative survey of the combustion and heat energy conversion field. The lectures will be given by persons recognized as experts in particular areas within the general field to be covered. It is hoped that the information to be provided will allow those working in the combustion and fuel industries to broaden and up-date their knowledge.

The material to be covered will include a review of the fundamental calculations, the physical laws and thermo-chemical relationships of combustion. The physical characteristics of the three normal types of fuels,

solid, liquid and gaseous will be presented along with the design, construction and use of burner equipment for both commercial and domestic applications. Various aspects of the design of boilers and furnace systems, commercial and domestic heaters, incinerators, etc., will be included. Air pollution aspects of combustion, instrumentation and control of combustion processes, will be a part of the course. Finally, atomic energy sources and new energy conversion devices presently under development will be discussed.

TEXT: None

TIME: Wednesdays, 7:00-9:00 p.m., commencing October 8
PLACE: 252, Mechanical Building, St. George Campus
FEE: $95.00 — 20 sessions

(Offered in co-operation with the Institute of Combustion and Fuel Technology of Canada, Ontario Branch)

COMPUTER AIDED ENGINEERING DESIGN
I. W. Smith
R. G. Fenton

This course is intended to show methods of augmenting design procedures by the power of the computer in a generalized way. Programming will be discussed for illustrative purposes but use of the University computer is not included. Special applications will be covered by guest speakers and case studies.

The topics to be covered will include: application of the computer to design analysis of components and systems, including optimizing and data storage techniques; standard languages, commercial programmes and service bureaus, design of languages and programmes; conversational-mode design, graphic input and output; creative computerized design.

TEXT: C. R. Mischke, *An Introduction to Computer Aided Design,* Prentice-Hall.

TIME: Wednesdays, 7:30-9:30 p.m., commencing Oceober 8
PLACE: 116, Galbraith Building, St. George Campus
FEE: $100.00 — 20 sessions

COMPUTER PROGRAMMING AND ANALYSIS FOR ENGINEERS
A. C. Hewitt

This course covers scientific programming language and technique including programme analysis, logic diagramming, coding, debugging and documentation.

Examples of various applications are explored. Each student will be assigned a problem in his own area of interest to be carried through final computer programming.

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Other topics touched on will include: history of computers, their internal organization and design, symbolic logic, data processing and latest developments in computer language and application.

TEXT: D. D. McCracken, *A Guide to Fortran IV Programming*, Wiley and Sons, 1965.

TIME: Tuesdays, 7:30-9:30 p.m., commencing September 23
       Thursdays, 7:30-9:30 p.m., commencing September 25
PLACE: Tuesdays, 248, Galbraith Building, St. George Campus
       Thursdays, Erindale Campus
FEE: $75.00 — 25 sessions

(Offered in co-operation with the Association of Professional Engineers of Ontario)

COMPUTER PROGRAMMES FOR STRUCTURAL ENGINEERS

R. A. Collins
K. A. Selby

This course is intended for structural engineers, but others engaged in the professional practice of Civil Engineering should find it useful as well.

The objective of the course is to provide the participants with extensive experience in using a wide variety of digital computer programmes. Some of these programmes will be planned and written by the course participants. The list of programmes, all of which are non-proprietary, includes: M.I.T.'s Integrated Civil Engineering System (ICES) and a selection of its subsystems, in particular the Structural Design Language (STRUDL); medium and large size general purpose structural analysis programmes; industry originated programmes for the design of structural elements; various utility programmes and standard mathematical routines.

All programmes will be written in the FORTRAN language and the first three sessions will be devoted to instruction, practice and review of elementary FORTRAN.

Brief discussion and application of optimization in structural design and of computer graphics will provide insight into the potential of these techniques.

TEXTS: (1) *IBM 7094 IBSYS Operating System, Version* 13, *FORTRAN IV Language*, Form No. C28-6390. (2) W. Weaver, Jr., *Computer Programs for Structural Analysis*, Van Nostrand (paperback). (3) *ICES STRUDL — II Engineering User's Manual* (3 volumes), Dept. Civil Engineering, M.I.T. (4) *ICES: Programmer's Reference Manual*, Dept. Civil Engineering, M.I.T.

TIME: Thursdays, 7:30-9:30 p.m., commencing September 25
PLACE: 248, Galbraith Building, St. George Campus
FEE: $125.00 — 23 sessions

COMPUTER SCIENCE FUNDAMENTALS

D. M. Kaplan

This course will deal with the fundamental theoretical models of computation and the programming languages associated with them. The class will examine methods of prescribing syntax and semantics, and will look at the processing

languages "LISP", "COMIT" and "SNOBOL" in this regard. There will be a detailed analysis of "ALGOL" compilers and programming language implementation, including an examination of "ALGOL" constructs such as procedures and block structure. Among other items will be syntactic analysis methods including top-down and bottom parsing and precedence methods, and code generation.

PREREQUISITE: Three years' experience with computers and some university level mathematics, or approval of the instructor

TEXT: None

TIME: Mondays, 7:30-9:30 p.m., commencing September 22
PLACE: 220, Galbraith Building, St. George Campus
FEE: $95.00 — 25 sessions

DIGGING INTO THE PAST (Series Four)

In response to popular demand a fourth series in this expansive subject is offered. Archaeologists will describe phases of man's story on various continents from prehistoric levels to less ancient times. Man's fortunes in this old land of North America will be emphasized.

Archaeological Techniques and Interpretation	A. D. Tushingham Royal Ontario Museum
ROM Excavations at Altun Ha, British Honduras	David Pendergast Royal Ontario Museum
ROM Excavations in Iran	T. Cuyler Young Royal Ontario Museum
Archaeology of the Eskimo and Pre-Eskimo in the N.W.T.	R. J. McGhee National Museum of Man, Ottawa
Mound Builders of Ancient Wisconsin	W. M. Hurley University of Toronto
Mound Builders of Ancient Ontario	Walter Kenyon Royal Ontario Museum
Shipwrecks of Anegada, British Virgin Islands	Daniel A. Nelson Royal Ontario Museum
Prehistoric Labrador	William Fitzhugh Harvard University

Neolithic Cultures of Western Turkey	Jacques Bordaz
	University of Montreal

Africa and the Ancestry of Man	H. B. S. Cooke
	Dalhousie University

TEXT: None

TIME: Tuesdays, 8:00-9:30 p.m., commencing October 7
Wednesdays, 8:00-9:30 p.m., commencing October 8
PLACE: Tuesdays, Royal Ontario Museum
Wednesdays, Don Mills Library, 888 Lawrence Avenue East, Don Mills
FEE: $30.00 — 10 sessions

Order of lectures subject to change

(Offered in co-operation with the Royal Ontario Museum)

DYNAMIC BEHAVIOUR OF BEAMS AND FRAMES

P. M. Wright

This course is designed to familiarize the practising structural engineer with the analysis of beams and frames subjected to dynamic loadings such as those produced by earthquakes, shock and machinery.

The basic concepts will be presented through a study of the one-degree-of-freedom lumped mass system and simple distributed mass problems such as single span beams. These fundamental ideas will then be used to develop analysis techniques for plane frames and beams. Considerable time will be devoted to such topics as natural frequency, mode shapes, response spectra and the effect of various forcing functions.

Basic mathematical tools such as differential equations, matrix operation and the determination of eigen-values will be presented as required.

PREREQUISITE: Applicants are expected to have an engineering degree, or equivalent.

TEXT: J. M. Biggs, *Introduction to Structural Dynamics*, McGraw-Hill, 1964.

TIME: Tuesdays, 7:30-9:30 p.m., commencing October 7
PLACE: 316, Galbraith Building, St. George Campus
FEE: $75.00 — 15 sessions

ELECTRON MICROSCOPE METHODS IN THE BIOLOGICAL SCIENCES

F. W. Doane

This will be a lecture and laboratory course covering the theoretical and practical aspects of electron microscope methods employed in the biological sciences. The curriculum will include introductory lectures on electron optics, the electron microscope, cellular ultrastructure, methods of specimen preparation and photographic processing. Practical instruction will be given in the various methods of biological specimen preparation such as thin sectioning, negative staining and shadow casting. Students will be required to prepare specimens independently, to examine and photograph them in the electron

microscope, and to process electron micrographs. Some experience in basic laboratory procedures is required.

Registration will be limited to 13 students.

TEXT: None

TIME: Tuesdays, 7:00-9:30 p.m., commencing October 7
PLACE: 77, School of Hygiene, St. George Campus
FEE: $150.00 — 20 sessions

ADVANCED ELECTRON MICROSCOPY   *F. W. Doane*

This course is designed for biologists who are interested in the operation and maintenance of the electron microscope, and who are already familiar with the basic techniques of electron microscopy. The course will consist of lectures, practicals and discussions on the use of the electron microscope, and on the various techniques of electron microscopy applicable to biologists. It will also include a critical evaluation of the interpretation of fine structure. Previous experience in electron microscopy is essential.

Registration will be limited to 6 students.

TEXT: None

TIME: Thursdays, 7:00-9:30 p.m., commencing October 9
PLACE: 77, School of Hygiene, St. George Campus
FEE: $150.00 — 10 sessions

INTRODUCTION TO FLUIDICS   *E. Davison*

This course is designed to provide an introduction for the control engineer to the subject of fluidics. After a brief review of the necessary fundamentals of fluid flow, attention will be directed to the characteristics of various fluidic elements, such as jet inter-action devices, vortex valves, turbulence amplifiers, and sensors. Some typical fluidic systems and applications will be described and the course will conclude with a brief survey of related analytical techniques.

The course will cover: fundamentals of fluid flow, survey of fluidic elements and their characteristics, fluid sensors and related devices, some fluidic systems, analytical techniques.

TEXT: *Fluidic Systems Design Guide,* Imperial Eastman Corporation.

TIME: Thursdays, 7:30-9:30 p.m., commencing October 9
PLACE: 308, Galbraith Building, St. George Campus
FEE: $50.00 — 10 sessions

THE GREAT LAKES AS A RESOURCE

This course is a continuation of the one presented in 1968-69, "The Behaviour of the Great Lakes". However, attendance at this previous course is not a prerequisite.

The series is devised principally for junior staff of agencies working on the Lakes on one field and wishing to learn something of the work of others. There will be in addition a few who will be unfamiliar with technical problems on the Lakes, but interested in them.

The topics to be discussed are:

The Resource
  Great Lakes Systems and Connecting Channels
  Hydrology of the Basin

Utilization of the Resource
  Water Supply and Waste Disposal
  Navigation
  Recreation
  Wildlife

Enhancement of the Resource
  Regulation
  Shore Property
  Power Development and Navigation

Protection of the Resource
  Treatment and Disposal of Wastes
  Economics and Provincial Legislation
  Diversions
  International Co-operation

TEXT: A reading list will be provided.

TIME: Wednesdays, 8:00-9:30 p.m., commencing October 1
PLACE: University College, St. George Campus
FEE: $45.00 — 12 sessions

(Offered in co-operation with the Great Lakes Institute)

HEARING MEASUREMENT AND CONSERVATION   D. R. Warren
Course Director

This workshop is intended for occupational health nurses, industrial audiometric technicians and safety supervisors. It is designed to train participants to perform pure tone air conduction audiograms, implement an adequate hearing protection programme, and assist management in planning and conducting a hearing conservation programme under adequate supervision.

Instruction will follow that outlined and approved by industrial medical, nursing, and hygiene departments, as well as by speech and hearing organizations. Those in attendance will have an opportunity to become familiar with equipment ordinarily used for air conduction hearing measurement.

TEXT: None

TIME: Two and one-half days (full time) November 19, 20, 21
        Two and one-half days (full time) March 18, 19, 20
PLACE: St. Michael's College, St. George Campus
FEE: $100.00

HISTORY OF COSMOLOGY

H. C. King

This course will outline the growth of ideas about the nature and structure of the astronomical universe from earliest times to the present. Subjects discussed will include pre-Greek cosmogonies, the rise and fall of the Aristotelian and Ptolemaic systems, the significance of astrology, the systems of the world of Copernicus, Kepler, and Newton, ideas about the Milky Way System from W. Herschel onwards, the impact of the theory of relativity, and the work of Hubble and others regarding the concept of an expanding universe.

Although this Course supplements Astronomy I it is complete in itself and does not require attendance or pre-attendance at an introductory course.

TEXT: None

TIME: Tuesdays, 8:00-9:30 p.m., commencing October 7
PLACE: Lecture Room, McLaughlin Planetarium
FEE: $45.00 — 10 sessions

ILLUMINATION I

M. G. Currie

This course is designed to provide a sound, fundamental background in illumination for those in public lighting services, consulting engineering, lighting manufacturing and sales, architecture, etc. Applicants should be engineering or architectural graduates, technological institute graduates (e.g. Ryerson) or have equivalent educational background and experience. A brief resume of the applicant's qualifications will be required with the application form.

The topics covered will include: the eye and vision; radiation and light production; photometric theory; light sources; light control and lighting materials; photometry or daylight.

The course will consist of lectures, and laboratory and problem sessions. Discussion and active student participation will be encouraged.

TEXT: None

TIME: Tuesdays, 7:00-9:00 p.m., commencing September 23
PLACE: 210, Electrical Building, St. George Campus
FEE: $50.00 — 12 sessions

(Offered in co-operation with the Illuminating Engineering Society, Toronto Section)

ILLUMINATION II

M. G. Currie

This course is complementary to Illumination I and the applicants should have satisfactorily completed that course or be able to demonstrate competence in its subject matter.

This course will relate the fundamental principles discussed in Illumination I to the design of the visual environment — both interior and exterior. Consideration of the interrelation of lighting with other environmental factors (heating, air conditioning, acoustics, etc.) will be included.

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The course will consist of lectures, problem sessions, etc. Discussion will be encouraged.

TEXT: None

TIME: Tuesdays, 7:00-9:00 p.m., commencing January 6
PLACE: 210, Electrical Building, St. George Campus
FEE: $50.00 — 12 sessions

(Offered in co-operation with the Illuminating Engineering Society, Toronto Section)

INDUSTRIAL HEAT TRANSFER   *A. H. Abdelmessih*

This course is designed to provide workers with an understanding of the fundamentals of heat transfer and their applications in various fields of engineering.

The course will start with a basic review of the three mechanisms of heat transfer (conduction, convection and radiation). This will be followed by a detailed examination of the following topics: basic steady-state conduction theory and its applications to one-dimensional problems of insulation and extended surfaces; transient conduction theory and its application to heating and cooling problems; heat transfer by natural and forced convection including compact and irregular surfaces; heat transfer by radiation; heat transfer by continued conduction and convection and the theory and design of heat exchangers.

The course will emphasize the results of the analysis and a considerable amount of time will be devoted to introducing methods and techniques of solving practical engineering problems. Numerical and graphical techniques will be included.

Applicants should have a working knowledge of mathematics up to differential equations.

TEXT: H. Schenck, *Heat Transfer Engineering*, Prentice-Hall, 1961.

TIME: Wednesdays, 7:00-9:00 p.m., commencing September 24
PLACE: 107, Galbraith Building, St. George Campus
FEE: $95.00 — 25 sessions

INVERTEBRATES: MAN'S UNSEEN ASSOCIATES   *G. B. Wiggins*

The invertebrate animals comprise more than nine-tenths of all living animal species, and represent an enormous range of animal diversity. Yet, to most people, these creatures remain largely unknown, even though they populate in abundance the gardens, woodlands and waters of our everyday experience. Because the story of the invertebrate animals is the history of a large part of life on Earth, some comprehension of these creatures is as necessary for an educated man as any of the more traditional intellectual pursuits.

This course is offered as a guided tour of the invertebrate world. The aim will be to open new insights through which the pieces of information which almost everyone has acquired on these creatures can be integrated into a broader un-

derstanding of them and their evolution. Involvement for participants will be sought through the use of specimens, microscope demonstrations, slides, and a visit to the Museum's entomology department. In some of the sessions a dialogue will be developed, and discussion of questions raised by participants will be encouraged.

Registration will be limited to 40 students.

TEXT: None

TIME: Mondays, 8:00-9:30 p.m., commencing October 6
PLACE: 4, Royal Ontario Museum
FEE: $20.00 — 7 sessions

Order of lectures subject to change

(Offered in co-operation with the Royal Ontario Museum)

ADVANCES IN MATERIALS SCIENCE AND TECHNOLOGY

K. Aust
Course Director

This course is intended primarily to present the exciting advances and developments that have occurred in the past several years in the field of materials science and technology. This will include present-day concepts of the nature of metals, ceramics, glasses, polymers, composite materials, and the properties of these materials that have resulted in important technological advances in industry. The specific areas of materials where future advances may be anticipated will be discussed in detail.

The course is intended for engineers, scientists, managers and technicians who are presently engaged in a specific area of materials and who wish to broaden their interests and understanding. One of the main objectives will be to enable those who take the course to participate more readily in future advances in materials in relation to the needs of Canadian industry.

The lectures will be given by various senior members of the Faculty of Applied Science and Engineering and the Institute for Aerospace Studies, of the University of Toronto. These members are world-renowned in their respective fields, and are presently engaged in materials research. Many of the lecturers have recently worked in leading industrial research and development laboratories in Canada, U.S.A., and Europe, where they contributed to the present understanding and application of materials.

The general subjects will deal with: metals, ceramics and glasses, polymers, composite materials, and the important properties of materials such as mechanical, magnetic, electrical, thermal, chemical and optical. Typical examples of specific areas of materials development to be considered are: interfacial properties of metals in relation to brittleness and corrosion, control of grain orientations for better mechanical and magnetic properties, advances in precipitation and diffusion, high-density sintered materials — e.g., transparent alumina, high-temperature alloys, controlled cast structures, semi-conductors, lasers, superplasticity, superconductivity, fibre-reinforced materials, and deformation of metals (fatigue).

TEXT: None

MEDICAL MICROBIOLOGY
V. V. Kingsley

This class will deal mainly with those aspects of microbiology important to the diagnosis and identification of microbial agents for human disease. The natural history of these agents will also be considered. An outline of topics follows:

Introduction and History of Microbiology
General Characteristics of Microorganisms
Chemical Activities of Bacteria
Effects of Physical and Chemical Agents on Bacteria
Methods of Spread of Infectious Diseases
The Protective Mechanisms of the Body Against Infectious Diseases
Immunization
Intestinal Gram-Negative Bacteria: Cholera, Typhoid, and Dysentery
Other Gram-Negative Bacteria of Medical Importance
Gram-Positive Cocci: Staphylococcus, Streptococcus
The Anthrax Bacillus and Related Forms
The Tetanus Bacillus and Other Toxin-Producing Anaerobes
Corynebacterium Diphtheriae, Mycobacterium Tuberculosis
The Syphilis Spirochaete and Related Forms
Fungi of Medical Importance
Protozoan Infections, Malaria
The Nature of Viruses
Rickettsia, Typhus Fever, Psittacosis
Antibiotics
Disinfectants

TEXT: None

NATURAL RESOURCES AND THEIR MANAGEMENT (ISSUES IN CONSERVATION)
K. A. Armson
Course Director

To a significant extent, the well-being of Canada's economy is founded on the utilization of its natural resources. Therefore, to a very large degree the continuation and development of this economy is based on the wise management of these resources, many of which are renewable. The increasing rate of urbanization results in an ever greater proportion of the country's population living and working in environments where they are divorced from a first - hand knowledge and understanding of the resources which are the foundation of their own economic state.

This course has been designed to offer a comprehensive and authoritative overview of the major natural resources of the country, with emphasis on the ways in which these resources are being managed.

Land, air and water resources will be discussed. The management of these for food production, forestry, mining, fish, wildlife, and recreation will be illustrated, largely with reference to Ontario.

TEXT: A reading list will be provided.

TIME: Tuesdays, 7:30-9:30 p.m., commencing January 13
PLACE: 104, University College, St. George Campus
FEE: $50.00 — 13 sessions

(Offered in co-operation with the Ontario Forestry Association)

NATURAL SCIENCE

W. A. G. Morsink
J. L. Baillie
E. Haber

A composite course of illustrated lectures will be conducted by members of the Faculty of Forestry, the Department of Botany and the Royal Ontario Museum Department of Ornithology. The course will be composed of six sessions on trees, eight on birds, and six on wild flowers and ferns.

The series on trees will deal with the growth features of native and introduced trees and the use of these features in identification. Coloured slides, mounts and fresh materials will be used to illustrate the features discussed. In addition, there will be a field trip.

October 8, 15 —Broad-Leaved Trees in Summer Conditions Common in the Toronto Area (Leaves and Flowers)

October 29   —Identification of Common Conifers of N.E. America, Based on Foliage, Fruit and Bark Characteristics

October 29   —Unusual Conifers, Their Identification, Past and Present Distribution

November 5, 12—Identification of Broad-Leaved Trees in Winter Condition, Based on Winter Twigs, Bark and Fruit Characteristics

A study of birds will be illustrated with slides and motion pictures. There will be a visit to the research collection of birds at the Royal Ontario Museum and two field outings.

November 19   —Why Study Birds
November 26   —Procedure and Equipment
December 3   —Attracting Birds by Feeding Devices, Planting and Nest Boxes
December 10   —Local Birding Areas
January 7   —Identification of Habitats of Winter Birds
January 14   —Identification of Habitats of Spring Birds
January 21   —Identification of Habitats of Summer Birds
January 28   —Identification of Habitats of Autumn Birds

The sessions on Ferns and Wild Flowers will be illustrated with slides showing the plants in their natural habitats.

February 4	—Ferns and Related Spore-Bearing Plants and How They Reproduce
February 11	—Flowering Plants I — Their Reproduction and Classification, Buttercups to Daisies
February 18	—Flowering Plants II — Arrowheads to Orchids
February 25	—Flowers of Fields, Roadsides and Waste Places
March 4	—Woodland Flowers
March 11	—Flowers of Shores, Marshes, and Bogs

TEXT: D. F. Brockman, *Trees of North America,* Golden Press, New York, 1968 (available for purchase at the first class).

TIME: Wednesdays, 8:00-9:30 p.m., commencing October 8
PLACE: 7, Botany Building, St. George Campus
FEE: $50.00 — 20 sessions

INDUSTRIAL APPLICATION OF NUMERICALLY CONTROLLED MACHINE TOOLS

I. W. Smith
R. G. Fenton

A course for engineers, plant managers and accountants for the evaluation of numerical control as a production facility. This relatively new approach to small job-lot manufacture is ideally suited to the needs of many industrial areas in Ontario. Although first cost of N/C equipment may seem to be high, its proper utilization can effect real economies. The course deals with the selection of equipment, selection of suitable work, personnel requirements, economic factors and justification procedures. Peripheral equipment, such as computerized drafting, and the computer-controlled factory of the future will also be discussed. Guest speakers, case studies and field trips will augment the regular lectures.

TEXT: None

TIME: Mondays, 7:30-9:30 p.m., commencing October 6
PLACE: 314, Galbraith Building, St. George Campus
FEE: $95.00 — 20 sessions

PRE-UNIVERSITY CHEMISTRY

M. J. Phillips

This course is a preparation for university chemistry. It covers most of the topics studied in Grade 13 Chemistry and a few that are not. Some of the topics are considered in greater depth. Emphasis is on physical rather than on descriptive inorganic chemistry. Energy effects in chemical reactions, reaction rates, chemical and ionic equilibria, oxidation — reduction reactions, electron arrangement and the periodic table, the chemical bond in molecules in gas phase, in solids, and in liquids, will be considered. The course will conclude with an introduction to organic chemistry.

While no experimental work will be done by the student, certain techniques, equipment, and experiments will be demonstrated.

PREREQUISITES: While some time will be spent reviewing elementary work and while the presentation of new concepts will be based on first principles, it will be assumed that the student has had Grade 12 Chemistry or its equivalent.

SELECTED TOPICS IN REINFORCED CONCRETE
S. M. Uzumeri
M. P. Collins

This course is designed to familiarize the practising structural engineer with some advanced topics in the behaviour of reinforced concrete structures.

Among the topics to be presented are: a review of ultimate strength theory for sections with flexure and axial load; strength and behaviour of members subjected to shear, torsion, limit design of reinforced concrete slabs (yield line analysis); and the control of crack widths and deflections. In addition, there will be an introduction to the design of ductile reinforced concrete structures and their behaviour when subjected to time dependent loading such as earthquakes.

PREREQUISITE: Applicants are expected to have an engineering degree, or equivalent.

TEXT: None

TIME: Wednesdays, 7:30-9:30 p.m. commencing October 8
PLACE: 244, Galbraith Building, St. George Campus
FEE: $95.00 — 20 sessions

SYNTHETIC ORGANIC HIGH POLYMERS
H. L. Williams

This course is designed for chemists, chemical engineers, and those interested in high polymers used in such industries as plastics, rubber, synthetic resins and fibres.

Resins, rubbers, plastics, fibres and other synthetic organic high polymers can be synthesized from many raw materials by numerous processes. The main features of additional polymerization, condensation polymerization, ring-opening polymerization, cross-linking and branching, block and graft copolymerization, and other important processes will be described with examples. Characterization of polymers is accomplished by many new techniques which lead to an understanding of the macrostructure and the microstructure, and, in turn, to an understanding of the properties of the polymers. Specific properties of the polymers can be utilized in uses and applications whereby superior products can be made. New uses of polymers which are likely to become important in the future, including biomedical and environmental control applications, will be outlined. The main features of reinforced polymers, including the rapidly expanding use of composites, will conclude the course.

A knowledge of organic chemistry is essential, and experience in the industries mentioned will be useful in understanding the course.

TEXT: None

UNIT OPERATIONS AND PROCESSES OF SANITARY ENGINEERING

G. W. Heinke
Course Director

This course is designed to acquaint or refresh the practicing municipal and sanitary engineer with the theory and application of physical, chemical, and biological operations and processes for the treatment of water and domestic and industrial wastewater. Topics covered will include:

Quantity and Quality Analysis and Criteria
Sedimentation
Thickening
Flotation
Centrifugation
Hydrocyclones
Coagulation and Focculation
Filtration
Heat and Mass Transfer
Reactor Design Principles
Aerobic and Anaerobic Biological Waste Treatment
Disinfection
Nutrient Removal
Self-purification of Rivers and Lakes

Laboratory and pilot-plant procedures for the establishing of design criteria will be presented. Application of these criteria to the design of treatment facilities will be covered with student participation. No laboratory work is involved.

TEXT: A reading list will be provided.

TIME: Thursdays, 7:30-9:30 p.m., commencing October 9
PLACE: 120, Galbraith Building, St. George Campus
FEE: $95.00 — 20 sessions

VIRUSES AND VIRUS DISEASES

L. W. Macpherson

This course of lectures and laboratory demonstrations is of an introductory nature, and is designed to introduce the student to the basic groups of viruses, the special methods of laboratory investigation, and some of the more important virus infections of man. Students entering the course need not have any previous experience in microbiology. It should be of value and interest to members of the general public, particularly to those interested in careers in microbiology, and also to nurses, technicians and those concerned with the field of communicable diseases.

Sessions will deal with the history of viruses, their basic properties, and with the characteristics of the more important virus groups. Laboratory demonstrations will complement the lectures. A list of topics follows:

History of Viruses and Virus Infections
Special Properties of Viruses, Their Classification and Role in the Microbial World
Special Techniques and Equipment Employed in the Study of Viruses
Cultivation of Viruses in Animals and Embryonated Eggs and in Tissue Culture
Haemagglutination and Interference Phenomena
Rickettsiae and Important Rickettsial Infections
The Psittacosis Group
The Pox Virus Group
The Herpes Virus Group
Rabies and Rabies Virus
Arthropod-Borne Viruses
The Influenza Group
The Para-Influenza Group
The Measles Group
Adenoviruses
The Poliomyelitis Group
The Coxsackie and Echo Virus Group
Tumour Viruses and Cancer

TEXT: None

TIME: Mondays, 7:30-9:00 p.m., commencing October 6
PLACE: 103, School of Hygiene, St. George Campus
FEE: $75.00 — 20 sessions (including Laboratory fee)

Fine Arts

ART AND ARCHAEOLOGY OF THE HOLY LAND   *H. Rosenberg*

The past becomes more alive to us through the language of art than it does through words. Archaeologists are constantly making the stones speak, giving us new ways of seeing old places.

Students of this course will receive new insights into the culture and life of ancient man as unearthed by the spade of archaeologists. Slides of ancient art and sites will be employed to illumine the lectures.

TEXT: None

TIME: Mondays, 1:30-3:00 p.m., commencing October 6
PLACE: 108, Falconer Hall, St. George Campus
FEE: $35.00 — 10 sessions

CHINESE ART

The singularly important collections of Chinese art in the Royal Ontario Museum provide Torontonians with a special opportunity to learn about the world's longest continuous culture and its history through the works created by its people's hands. This course will introduce major aspects in the development of Chinese art, placing these within their cultural environment and tracing their origins and effects. Background lectures, using slides for illustrations, will alternate with gallery talks in which the immediate and direct experience of the objects will be emphasized. It is hoped that this course will provide the basis for better understanding and greater appreciation of China, its peoples and products.

Registration will be limited to 40 students.

Neolithic and Bronze Age China	Barbara Stephen
Confucius and the Development of Confucian China	Barbara Stephen
Early Representational Art in China,	Doris Dohrenwend
Arts of the Golden Age: T'ang China	Doris Dohrenwend
Folklore and Mythology in Chinese Art — (gallery talk only)	Barbara Stephen
Early Sculptural Art in China — (gallery talk only)	Hsio-yen Shih
Introduction of Buddhist Art to China	Doris Dohrenwend
Transformation of Buddhist Art in China	Hsio-yen Shih
Transmission of Buddhist Art to Japan	John Vollmer
Painting and the Establishment of Decorative Taste in Chinese Art	Hsio-yen Shih
Later Chinese and Japanese Decorative Arts	John Vollmer
Later Chinese and Japanese Decorative Arts	Hsio-yen Shih

TEXT: None

TIME: Wednesdays, 8:00-9:30 p.m., commencing October 8
PLACE: Room 4 or Far Eastern Galleries, Royal Ontario Museum
FEE: $40.00 — 20 sessions

Order of lectures subject to change

(Offered in co-operation with the Royal Ontario Museum)

CHORAL SINGING   *J. McKnight*

This course is for people interested in singing (solo and choral) but whose training has been limited.

Each session will deal with sight-singing, ear training and rhythm, classification of voices, and problems of breath control. Resonance and diction will be stressed.

The entire class will participate in the singing of a choral repertoire (easy to medium vocal difficulty) and members will be invited to perform, although this is not a requirement. Guest soloists will be available on occasion.

TEXT: None

TIME: Tuesdays, 7:30-9:00 p.m., commencing October 7
PLACE: 215, Royal Conservatory of Music
FEE: $45.00 — 20 sessions

THE CINEMA FROM GRIFFITH TO GODARD   J. A. Medjuck
C. Denton

This course will consist of a series of lectures on the history and aesthetics of
the cinema. Each lecture will be illustrated with film material and a number of
feature films will be shown. Among the directors whose work will be shown
and discussed will be: D. W. Griffith, Sergei Eisenstein, Buster Keaton, Charlie
Chaplin, F. W. Murneau, Luis Bunuel, Alfred Hitchcock, John Ford, Orson
Welles, and Jean-Luc Godard.

TEXT: None

TIME: Wednesdays, 7:30-9:30 p.m., commencing October 8
PLACE: 102, Mechanical Building, St. George Campus
FEE: $50.00 — 20 sessions

HISTORICAL ROOTS OF CONTEMPORARY   N. L. Keehn
PAINTING

This course is an introduction to the basic concepts of modern art, showing
their development from traditional, historical art. Slides and films will be used
to illustrate the changes and developments in composition throughout history
from Prehistory, the Middle Ages, the Renaissance and the Modern Period.
The sociological and technological developments relevant to these changes will
also be discussed.

TEXT: None

TIME: Wednesdays, 2:00-3:30 p.m., commencing October 8
PLACE: St. John's Anglican Church, York Mills
FEE: $35.00 — 10 sessions

THE HISTORY OF ARCHITECTURE IN ONTARIO   A. Adamson
W. Goulding

This course will examine the story of building in Ontario from the earliest
primitive shanty to the Toronto-Dominion Centre. The evolution of style
through the decades will be described, comment will be made on the
development of technology, and the architecture of Ontario will be placed in
the history of architecture in North America and Europe.

Descriptions will be illustrated.

A special evening tour will be made to Dundurn Castle in Hamilton to examine
the mid 19th-century workings and furnishings of a great house. Other tours
may be arranged if there is sufficient class interest.

TEXT: None

TIME: Tuesdays, 8:00-9:30 p.m., commencing September 30
PLACE: University College, St. George Campus
FEE: $50.00 — 12 sessions

THE IMPACT OF CHRISTIANITY ON ART   *M. McMurrich*

The impact of Christianity upon early Graeco-Roman and Byzantine painters and sculptors to twentieth century artists will be examined in this course.

The first term sessions will explore the development in Byzantium and Western Europe of sculpture, mosaics, illuminated manuscripts, stained glass, and frescoes up to the early Renaissance. Second term sessions will trace the re-development of humanistic thought and the revival of Classical Art during the Renaissance and its evolution to the present day with reference to the Christian religion and the effects of Protestantism, the Counter-Reformation, and the various ideologies of the eighteenth, nineteenth and twentieth centuries.

TEXT: None

TIME: Wednesdays, 8:00-9:30 p.m., commencing October 8
PLACE: 119, Victoria College, 73 Queen's Park, St. George Campus
FEE: $50.00 — 20 sessions

MUSIC THROUGH THE AGES   *P. B. Holt*

The course will enhance the music lover's enjoyment by assisting him to explore music of all ages with an increased awareness of the factors involved. Topics to be considered are:

Materials of Music
Basic Principles
Gregorian Chant to Palestrina
Early Song Forms
Development of Early Instrumental Forms
The Fugue and Music of Bach
The Suites of Bach and Handel
The Classical Period — Mozart and Hayden
Beethoven
Brahms
The Romantic Period
Theme and Variation
Cesar Franck and Cyclic Form
Impressionism
Stravinsky and Instruments of the Orchestra
Hindemith and Prokofiev
Programme and Absolute Music
Music of the Twentieth Century
Trends of the Twentieth Century

TEXT: None

TIME: Thursdays, 8:00-9:30 p.m., commencing October 9
PLACE: Alumni Hall, Victoria College, St. George Campus
FEE: $50.00 — 20 sessions

MUSICAL FORMS, PERIODS, AND COMPOSERS   *J. H. Dewdney*

This course is designed to give music lovers some knowledge of the various musical forms, periods and composers. Excerpts from great works are used for illustration. A list of course topics follows:

Basic Essentials and Classifications
An Easy-To-Follow Outline of Music and Composers in Different Eras
Rose-Coloured Glasses: Romanticism, The Most Popular Period
Back to the Womb: The Conception and Birth of Modern Music, Music up to the Renaissance
Italians at Work: The Opera to Gluck
All Rivers Run into the Sea: Bach and the Baroque
Apartment or Palace? Musical Form (Sonatas and Other Types)
Plainsong to Jazz Mass: Church Music Through the Centuries
The Power of the Spirit: Beethoven
Carols and Christmas Music, Old and New
What Ten Fingers Can Do: The Keyboard and its Music
The Thinker: Behind the Scenes — Aspects of Musical Theory and Notation
Music Drama: Wagner and Other Types
The Voice, from Madrigal to Lied
Instrumental Chamber Music
Blow, Scrape or Hammer: The Orchestra and its Music
Musical "Gimmicks": Nationalism, Programme Music
Those Modernists
The Ten (!) Greatest Works of All Time

TEXT: J. H. Dewdney, *The Theory and Practice of Music* (Price $4.50 — obtainable at first and second classes).

TIME: Wednesdays, 8:00-9:30 p.m., commencing October 8
PLACE: Alumni Hall, Victoria College, St. George Campus
FEE: $50.00 — 20 sessions

OPERA FROM WAGNER TO THE PRESENT DAY   *B. Neel*

These lectures will be offered as a completion of last year's comprehensive survey of the history of opera. Starting with Richard Wagner and the founding of Bayreuth, the course will deal with the National Schools of the late 19th century: Verismo, Richard Strauss, Alban Berg and contemporary opera.

TEXT: None

TIME: Mondays, 8:00-9:30 p.m., commencing October 6
PLACE: 7, Victoria College, 73 Queen's Park, St. George Campus
FEE: $35.00 — 10 sessions

PIANO CLASSES FOR ADULT BEGINNERS   *B. Gibson*

There are many adults who deeply regret that for various reasons they did not study piano in their youth. Recognizing this, the Division has arranged with the Canadian Bureau for the Advancement of Music to provide a course for adults. This course will extend from September to May, and will consist of thirty one-hour lessons.

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The syllabus covered will include: playing of pieces, exercises, scales, chords, theory, ear training, pedal technique, sight reading and simple transposition.

The thorough grounding in music to be gained in this course will enable students to proceed with further study of piano, or to take on study of other instruments or voice, because of the real understanding of music they will possess.

TEXT: The required text may be purchased in class on the first night.

TIME: Tuesdays, 7:30-8:30 p.m., commencing September 30
           Tuesdays, 8:45-9:45 p.m., commencing September 30

PLACE: 108, Falconer Hall, St. George Campus

FEE: $120.00 — 30 sessions

(This fee may be paid in three installments of $40.00 each)

ADVANCED PIANO CLASS
B. Gibson

This course is for those who have attended "Piano Classes for Adult Beginners" or others who have had equivalent experience. Advanced technique and theory will be taught, and there will be an opportunity for concentrated sight reading and transposition study. Time will also be devoted to the playing of pieces and exercises.

TEXT: The required text may be purchased in class on the first night.

TIME: Wednesdays, 7:30-8:30 p.m., commencing October 1

PLACE: 108, Falconer Hall, St. George Campus

FEE: $135.00 — 30 sessions

(This fee may be paid in three instalments of $45.00 each)

Languages

CHINESE LANGUAGE AND CULTURE
V. T. Yang

The aim of this course is to teach students, who have no previous knowledge of Chinese, how to speak and understand the type of Chinese most widely used in present-day China. This is the language commonly referred to in the Western world as "Mandarin" or the "National Language". While emphasis will be placed on practical conversation and the acquisition of useful vocabulary, the student will also be introduced to the Chinese writing system.

Language training will be supplemented by occasional informal lectures on various aspects of Chinese culture.

Registration will be limited to 25 students.

TEXT: H. C. Fenn, M. G. Tewksbury, *Speak Mandarin: A Beginning Text in Spoken Chinese,* Yale University Press, 1967.

TIME: Tuesdays, 7:00-9:30 p.m., commencing September 30

PLACE: 334, East Asian Studies, St. George Campus

FEE: $125.00 — 20 (2½ hr.) sessions

ENGLISH LANGUAGE SUMMER SCHOOL

This six-week summer school is for persons whose native language is other than English. It will be offered from June 19 to July 31, 1970. Participants will engage in five hours of formal classroom work per day plus a programme of social and cultural activities. Classes in literature, dramatic art, history, and politics will complement language training sessions.

Further information about this programme will be available in January 1970. Those interested may telephone 928-2400 to have their names added to the English Language Summer School mailing list.

ENGLISH AS A SECOND LANGUAGE (ADVANCED)

D. E. Hamilton
Course Director

These courses are intended for persons whose native language is other than English. Linguist-instructors will approach the learning of English as a second language with scientifically based methods designed to develop an English language reflex. Emphasis will be placed on the development of conversational fluency and accurate expression of thought, with special attention being given to pronunciation, English structure, oral patterns of English, and special vocabularies. Some attention will also be directed to the improvement of reading and writing skills. The overall goal will be to effect greater sophistication in the students' understanding and use of the English language.

PREREQUISITE: Basic functional facility in English is a prerequisite for admission to these courses. They are not intended for beginners. With the application form, applicants are required to submit evidence of their level of English facility.

TEXT: T.B.A.

TIME: *Class I:*
         Tuesdays and Thursdays, 7:00-9:00 p.m., Sept. 23 to Nov. 27
         Class II:
         Mondays and Thursdays, 7:00-9:00 p.m., January 12 to March 19
         Class III:
         Tuesdays and Thursdays, 6:30-8:30 p.m., May 5 to July 9

PLACE: Victoria College, St. George Campus
FEE: $100.00 — 20 sessions

TIME: *Class IV:*
         Wednesdays, 7:00-9:00 p.m., October 8 to December 10
         Class V:
         Tuesdays, 6:30-8:30 p.m., January 13 to March 17

PLACE: Victoria College, St. George Campus
FEE: $55.00 — 10 sessions

FRENCH

A four-stage programme is offered to those who wish to learn French and use it as a living language.

You may join the programme at any stage (I, II, III, IV) depending on your previous experience and knowledge of the language. You will be interviewed by a member of the staff on the first evening of classes to make sure you have chosen an appropriate course. The language laboratory of University College is open for Extension students in the evenings, from Monday to Friday, 6:00-8:00 p.m. For those interested, there will be singing of French songs on Tuesday evenings from 7:00-7:30 p.m.

STAGE I: VOIX ET IMAGES DE FRANCE   N. Seguinot

This is an introductory conversational course using the famous Saint Cloud method. This popular and highly successful method, using film strips, sound tapes and other audio-visual materials, involves the student immediately in the sights and sounds of the modern French environment.

The course is offered in two composite parts: A — lessons 1-16; 90 hours of instruction including laboratory practice; B — lessons 17-32; 90 hours of instruction including laboratory practice.

TEXT: *Voix et Images* (included in fee).

TIME: Mondays and Thursdays, 7:30-9:00 p.m., commencing September 15
        Mondays and Thursdays, 7:30-9:00 p.m., commencing February 23
PLACE: University College, St. George Campus
FEE: $125.00 — 40 sessions

STAGE II: EN FRANCE COMME SI VOUS Y ETIEZ   M. Walker

This course is intended for students who have completed *Voix et Images* or who possess a basic knowledge of oral French. EN FRANCE is a fascinating and dynamic course employing movies, records and an attractively illustrated manual. Dialogues, skits, songs and scenes from the films are reproduced in the manual along with essential grammatical review and exercises. Fifty-two hours of instruction are provided, and, in addition, up to a maximum of five hours of language laboratory work are included.

TEXT: *En France,* (The En France kit will be available for student purchase at the first class. Price: $35.00. See Page 66 for a description of the kit.)

TIME: Tuesdays, 7:30-9:30 p.m., commencing September 16
        University College, St. George Campus
        $125.00 — 26 sessions

STAGE III: ADVANCED FRENCH LANGUAGE AND CONVERSATION

The following courses are offered to students who have completed EN FRANCE or an equivalent course. You may select one of the following:

A) FRENCH CONVERSATION THROUGH NEWSPAPERS AND MAGAZINES

C. R. Parsons

You will be asked to read articles in a French newspaper and magazine and report in French to the class. These reports serve as a basis for class discussion. The tuition fee includes a subscription to an outstanding French newspaper and magazine which the student will receive regularly at home.

TEXT: Reading as described above will be required.

TIME: Tuesdays, 7:30-9:00 p.m., commencing October 7
PLACE: University College, St. George Campus
FEE: $105.00 — 20 sessions

B) LE LANGAGE DE LA FRANCE MODERNE

This course is intended for students who wish to extend their knowledge beyond the strictly conversational field. The classes include grammar, translation and dictation, reading, short essay writing and conversation.

TEXT: Hebling, Barnett, *Le Langage de la France Moderne*, Holt, Rinehart and Winston.

TIME: Tuesdays, 7:30-9:00 p.m., commencing October 7
PLACE: University College, St. George Campus
FEE: $100.00 — 20 sessions

STAGE IV: CONTINUING FRENCH

Students who have completed STAGE III of the programme or its equivalent and who possess some fluency in speaking French may select one of the following:

A) CHEZ LES FRANCAIS

G. M. Saint-Aubin

This course is intended to sustain and develop the student's ability in speaking French. Topics of special interest to each student and subjects related to life and culture in French society are prepared in advance. These classes include reading, translation, grammar, and are conducted entirely in French.

TEXT: L. R. Vienan, *Chez Les Français*, Harcourt, Brace and World.

TIME: Tuesdays, 7:30-9:00 p.m., commencing October 7
PLACE: University College, St. George Campus
FEE: $85.00 — 20 sessions

B) CONVERSATION THROUGH FRENCH LITERATURE

A. R. Curtis

The reading and study of a number of contemporary French novels, short stories and plays form the background for conversation and discussion in this course. Short appreciation of the works selected will be presented by the instructor, but the whole stress will be on class participation. All discussions are conducted in French and plays will be acted in class.

TEXTS: A. Camus, *L'Etranger* — Livre de poche No 406
G. Courteline, *Boubouroche* — Livre de poche No 1340
Feydeau, *La Puce à l'oreille* — Livre de poche No 2506
Saint-Exupéry, *Vol de nuit* — Livre de poche No 3

TIME: Tuesdays, 7:30-9:00 p.m., commencing October 7
PLACE: University College, St. George Campus
FEE: $85.00 — 20 sessions

EN FRANCE
(Morning)
<div align="right">*M. Walker*</div>

An illustrated film shown during the first half hour of the class, depicting real-life scenes, filmed in France, and using French actors, will bring alive the words and situations described in the books and heard on the records which are used in this course.

While EN FRANCE is designed for home study, the University course will provide what the student studying at home cannot have, namely, the help of an instructor and the opportunity to ask questions. Each student will receive a complete EN FRANCE kit on payment of the tuition fee.

Only a limited number of students will be accepted as this is a concentrated course.

TEXT: The En France material described on Page 66 is included in the course fee.

TIME: Mondays and Thursdays, 9:45-11:45 a.m., commencing September 15
PLACE: 108, Falconer Hall, St. George Campus
FEE: $125.00 — 26 sessions

INTENSIVE ORAL FRENCH FOR
BUSINESS PEOPLE
<div align="right">*J. G. Chidaine*</div>

This course has been specially developed as a concentrated oral French programme for business people, and consists of two two-and-one-half hour sessions weekly starting at 5:45 p.m., for a period of thirteen weeks. Registration will be limited to a small group to ensure adequate coverage of the material.

Each two-and-one-half hour session will be organized as follows: the first half hour will be taken up with a film in the EN FRANCE series; then two full hours will be devoted to oral work covering the material contained in the film and intensive drill exercises based on the lesson.

TEXT: *En France* (The En France kit will be available for student purchase at the first class. Price: $35.00. See Page 66 for a description of the kit.)

TIME: Mondays and Thursdays, 5:45-8.15 p.m., commencing September 15
Mondays and Thursdays, 5:45-8:15 p.m., commencing January 12
PLACE: 102, Falconer Hall, St. George Campus
FEE: $140.00 — 26 sessions

The En France Kit includes:

40 long-playing, hi-fidelity, easy-to-handle, seven-inch records. Produced by a revolutionary new process, their eight hours of playing time are divided into short, easily-absorbed segments.

A beautifully designed 384-page EN FRANCE book, with more than 1000 photo illustrations. It includes a travel guide to France.

A hard-cover album with a separate compartment for each record. Supplementary material is included.

FRENCH SUMMER SCHOOL — 1970
SAINT-PIERRE, ST-PIERRE ET MIQUELON

If you cannot go to France next summer, come to Saint-Pierre. Improve your knowledge of spoken French and spend a fascinating holiday in an old world setting.

Beginners Oral French   2 sessions of 4 weeks
                                           July or August

The method used is "Voix et Images de France", a course in conversational French developed at the Ecole Normale Supérieure de Saint-Cloud (France). Audio-visual materials — film strips, sound tapes, etc. — are used constantly in the classroom under the guidance of competent instructors. This unique method, used in Saint-Pierre, enables the student to put immediately into actual practice what he has just learned in the classroom.

Intermediate Oral French   2 sessions of 4 weeks
                                           July or August

Advanced Oral French   2 sessions of 4 weeks
                                           July or August

Lectures and practical work are intended to develop proficiency in spoken French. The Division of University Extension will provide a brochure which will be distributed, upon request, early in February.

SCHOOL DIRECTOR: C. R. Parsons, University College, University of Toronto.

STAFF: The School Staff is supplied by the University of Toronto and secondary school teachers from St-Pierre who were trained in France.

GERMAN I

H. Milnes
A. Krygsman

This is a course for beginners. It will begin with the reading and translating of simple German passages with an explanation of the essentials of the grammar. There will be practice in pronunciation and students will be expected to do some preparation at home each week. Graded readings in an elementary book will be undertaken and in the second term conversational material will be included. This will be supplemented by readings of contemporary interest. Students who put concerted effort into the course should be able to handle free and idiomatic German with some degree of facility by the end of the course.

TEXT: Fehling, Paulsen, *Elementary German*, 2nd ed. Please bring the textbook to the first class.

TIME: Mondays, 8:00-9:30 p.m., commencing October 6
PLACE: University College, St. George Campus
FEE: $75.00 — 20 sessions

GERMAN II

W. A. Packer

This is a course for those who have completed German I or its equivalent and want to work towards greater fluency in conversation and ease in reading German. Essential principles of grammar will be reviewed with the specific aim of developing the student's ability to make use of them independently in everyday speech. There will be practice in reading aloud and free conversation.

TEXT: T.B.A.

TIME: Mondays, 8:00-9:30 p.m., commencing October 6
PLACE: University College, St. George Campus
FEE: $80.00 — 20 sessions

ITALIAN I

P. Frohman
A. Nigro
R. Capozzi

This is a course for those who have not studied Italian previously. Oral practice will be stressed with attention being given to grammar, structure, and pronunciation.

TEXT: Palermi, Bottke, *Practical Italian*, Vanni Publishers.

TIME: Tuesdays, 8:00-9:30 p.m., commencing October 7
PLACE: University College, St. George Campus
FEE: $75.00 — 20 sessions

ITALIAN II

A. Verna

This course is for those who have completed Italian I or its equivalent, and will consist of a brief review of Italian grammar, oral practice, and readings from Italian authors. The classes will be conducted in both English and Italian.

TEXTS: (1) Speroni and Golino, *Basic Italian*, Holt, Rinehart and Winston.
(2) Cioffari and Van Horne, *Letture varie*, D. C. Heath.

TIME: Wednesdays, 8:00-9:30 p.m., commencing October 8
PLACE: University College, St. George Campus
FEE: $80.00 — 20 sessions

ITALIAN III   *A. Franceschetti*

Italian III is for students who have completed Italian II or its equivalent.
Classes will be conducted in Italian and will consist of grammar review and
conversation.

TEXT: Cioffari, Van Horne, *Letture varie,* D. C. Heath.

TIME: Wednesdays, 8:00-9:30 p.m., commencing October 8
PLACE: University College, St. George Campus
FEE: $80.00 — 20 sessions

JAPANESE LANGUAGE AND CULTURE   *K. Tsuruta*
                                                          Course Director

With Japan's Expo '70 just around the corner, those persons who plan to
attend the exposition will be interested in these intensive courses in Japanese
language and culture which the Division is offering in co-operation with the
University of Toronto Department of East Asian Studies.

This programme aims at the acquisition of a new set of speaking reflexes.
Primary emphasis will be placed on drill and language laboratory sessions
rather than on learning about the language. Reading and writing Japanese
scripts, an activity quite different from the cultivation of oral habits, will be
introduced in the second level course.

In Level I, a number of sessions will be devoted to presenting the basics of the
living dynamics of Japanese people by exploring various phases of Japanese
culture such as language, fine art, music, theatre, religion, architecture, and
social structure. These cultural sessions will be conducted by University of
Toronto professors and by personnel from organizations such as the Japanese
Consulate, the Japanese-Canadian Cultural Centre, and the Japan Trade
Centre. Some carefully selected films covering a wide range of interests will
also be shown.

Level I

PREREQUISITE: None

TEXT: E. H. Jorden, *Beginning Japanese, Part I,* Yale University Press, 1962.

TIME: Mondays and Wednesdays, commencing September 17
         Language sessions — 6:30-8:30 p.m., twice weekly for 25 weeks
         Culture sessions — 8:30-9:30 p m., Wednesdays for 20 weeks
PLACE: Victoria College, St. George Campus
FEE: $200.00 — 50 sessions

Level II

PREREQUISITE: Level I, or equivalent

TEXT: E. H. Jorden, *Beginning Japanese, Part II,* Yale University Press, 1962.

TIME: Tuesdays and Thursdays, commencing September 18
         Language sessions — 6:30-8:30 p.m., twice weekly for 25 weeks
PLACE: Victoria College, St. George Campus
FEE: $175.00 — 50 sessions

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OJIBWAY

F. Wheatley

Ojibway is the most widely spoken Indian language in Ontario. It is used in an area extending from north of Toronto, around the Great Lakes and north western Ontario, almost to James Bay and Manitoba. Ojibway has some similarities to Plains Cree on the Prairies and Saulteaux in Manitoba. The instructor is himself an Ojibway Indian.

It is hoped that this course will provide students with a knowledge and mastery of conversational Ojibway. Through the language laboratory at University College, particular emphasis will be laid upon pronunciation and at the end of the course it is hoped that all students will be able to communicate with Indians who use this language.

TEXT: None

TIME: Thursdays, 8:00-10:00 p.m., commencing October 9
PLACE: University College, St. George Campus
FEE: $75.00 — 20 sessions

RUSSIAN I

R. H. Marshall

This is a course for those who have not studied Russian previously. Attention will be given to grammar and elementary reading, and oral practice will also be stressed.

TEXT: Von Gronicka, Bates Yakobson, *Essentials of Russian*, Prentice-Hall, 1964.

TIME: Wednesdays, 8:00-9:30 p.m., commencing October 8
PLACE: University College, St. George Campus
FEE: $75.00 — 20 sessions

RUSSIAN II

I. Evreinov

This course will be a continuation of Russian I. Grammar, further reading and oral practice will be stressed.

TEXT: G. Stilman, W. G. Harkins, *Introductory Russian Grammar*, Waltham, Man, 1964 (Blaisdell).

TIME: Tuesdays, 8:00-9:30 p.m., commencing October 7
PLACE: University College, St. George Campus
FEE: $80.00 — 20 sessions

SPANISH I

J. Barajas
J. Ara
I. Chicoy-Dabán

This is a course for those who have not studied Spanish previously. Attention will be given to grammar and elementary reading, and oral practice will also be stressed.

TEXT: Lagrone, *Basic Conversational Spanish,* Holt, Rinehart and Winston.

TIME: Wednesdays, 8:00-9:30 p.m., commencing October 8
PLACE: University College, St. George Campus
FEE: $75.00 — 20 sessions

SPANISH II
M. J. Maillard

This course is for those who have completed Spanish I or its equivalent, and will include a review of grammar, and composition and conversation.

TEXT: LaGrone, McHenry, O'Connor, *Entender y Hablar* (revised), Holt, Rinehart and Winston.

TIME: Mondays, 8:00-9:30 p.m., commencing October 6
PLACE: University College, St. George Campus
FEE: $80.00 — 20 sessions

SPANISH III
J. Barajas

This course is for those who have completed Spanish II or its equivalent. Special attention will be given to oral practice and composition.

TEXTS: (1) Foster, *Spanish Composition Based on Modern Spanish Texts,* Norton Publishing House. (2) Rogers, Butler, *Florilegio de Cuentos Espanoles,* Macmillan Co.

TIME: Mondays, 8:00-9:30 p.m., commencing October 6
PLACE: University College, St. George Campus
FEE: $80.00 — 20 sessions

Law

LEGAL ASPECTS OF BUSINESS
J. A. Brownlie

This course is intended to furnish students with a general understanding of law and to help them avoid legal pitfalls which commonly arise in business. It is designed primarily for persons in financial institutions but should be of use to all business people. The course consists of a general introduction to commercial law, its history and administration. Special attention will be given to contracts, bills of exchange, security documents (other than land security documents) and to the protection of property rights through the laws of patents, trademarks, torts and insurance. Certain statutes of special interest and the law relating to corporations and bankruptcies and civil remedies will be reviewed. Students will be required to analyze and formulate practical solutions for commercial legal problems.

Participation in a short period of court attendance will form an integral part of the course. Special emphasis will be placed on student participation in lecture discussions and seminars.

TEXTS: J. E. Smythe, D. A. Soberman, *The Law and Business Administration in Canada,* 2nd ed., Prentice-Hall. Various Statutes, as required and announced.

TIME: Mondays, 7:00-9:00 p.m., commencing September 22
PLACE: B, Faculty of Law, St. George Campus
FEE: $95.00 —25 sessions

This course may be taken as part of the Fellows' Programme in Banking.

LEGAL PRINCIPLES AFFECTING THE ENGINEER,   *J. I. Stewart*
SURVEYOR, ARCHITECT, ETC.

This course is designed to present to professional people, particularly those whose practice is primarily concerned with the development and/or use of real property, general aspects of the law concerning contracts and torts and special aspects of real property law, such as expropriation, planning, zoning, assessment and taxation. It consists of the first term of the course "Legal Principles of Special Business Problems".

TEXT: J. E. Smythe, D. A. Soberman, *The Law and Business Administration in Canada,* 2nd ed., Prentice-Hall. Various Statutes, as required and announced.

TIME: Thursdays, 6:00-8:00 p.m., commencing September 25
PLACE: 305, Galbraith Building, St. George Campus
FEE: $60.00 —12 sessions

LEGAL PRINCIPLES OF   *J. I. Stewart*
SPECIAL BUSINESS PROBLEMS

This course has been designed to complement that entitled "Legal Aspects of Business". The topics covered, apart from some introductory sessions, deal with some of the areas of business and professional practice in which a legal problem may arise (particularly under some branch of statute law), either without being recognised as such or before an opportunity is presented to adequately consult a solicitor. No prior knowledge of law is assumed. Matters to be discussed include:

Introduction to the Canadian Legal System
The Law of Contracts and of Torts
Special Aspects of Real Property Law, such as Expropriation, Planning and
    Zoning, Assessment, Taxation
Collective Bargaining
Credit and Bankruptcy
Combines Investigation and Other Criminal Offences in Business

TEXTS: J. E. Smythe, D. A. Soberman, *The Law and Business Administration in Canada,* 2nd ed., Prentice-Hall. Various Statutes, as required and announced.

TIME: Thursdays, 6:00-8:00 p.m., commencing September 25
PLACE: 305, Galbraith Building, St. George Campus
FEE: $100.00 — 25 sessions

Literature

ANCIENT AND CONTEMPORARY LITERARY THEMES

H. Rosenberg

This course approaches the Bible as a book to be studied for insight into the modern human situation. Other literature of the peoples of the ancient world will also be examined as a source of comparative study.

The Bible will also be studied as source-book of themes in contemporary world literature.

TEXT: None

TIME: Thursdays, 1:30-3:00 p.m., commencing October 9
PLACE: 108, Falconer Hall, St. George Campus
FEE: $50.00 — 20 sessions

ABOUT BOOKS FOR CHILDREN

M. Bagshaw

This course is for parents, group leaders, teachers, school librarians, and others who are concerned with and interested in children's reading. It will survey various categories of children's literature always with reference to specific books, the criteria for choosing them, and their place in the child's life. There will be displays both of books discussed and of others suitable for children from infancy through Grade VIII. Some of the treasures from the Osborne Collection of Early Children's Books will be shown.

Topics to be covered include:

Books of Information in General
Folk Literature
Story Telling
Epic and Myth
People and Events in History
Historical Fiction
Fantasy in Fiction
Realistic Fiction
The Classics in New Editions
Picture Books
Poetry and Verse

TEXT: None

TIME: Tuesdays, 8:00-9:30 p.m., commencing October 7
PLACE: Boys and Girls Theatre, Toronto Public Library
St. George and College Streets
FEE: $40.00 — 12 sessions

(Offered in co-operation with the staff of Boys and Girls Services of the Toronto Public Libraries)

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THE LIFE AND WORK OF ROBERT BROWNING G. Cotter

Regarded as an innovator of obscure meaning, a delver into the imagery of faith and the psychology of motivation, living as an expatriate during most of his working life as a poet, shy about his private life, and during his late years and posthumously regarded as an oracle on behalf of the *status quo* — it might be T. S. Eliot, 1888-1965, but it is, for purposes of this course, Robert Browning 1812-1889.

The course will explore some of these comparisons with T. S. Eliot, to show some of Browning's 'modern' traits, and also to examine some Victorian issues which are still with us today. The course will, however, be chiefly a study of the poet's writing.

This course is offered in two parts, 10 afternoons in the Fall, and 10 in the Winter. The parts may be taken separately, though the course in the Fall is recommended as a prerequisite to the Winter segment.

Part A: 1. Browning the Romantor, the Radical, the Dreamer: — The poem *Pauline,* its imagery and associations

      2. Browning to the Rescue (his courtship with Miss Barrett):
          The letters of Robert Browning and Elizabeth Barrett Browning, 1845-46
          Two in the Campagna
          The Statue and the Bust
          Women and Roses
          Love Among the Ruins
          'Childe Roland to the Dark Tower Came'

      3. Browning and the Dramatic Monologues:
          My Last Duchess
          Andrea del Sarto
          The Bishop Orders His Tomb
          Fra Lippo Lippi

Part B: 1. A Reconsideration of Browning's Crisis:
          By the Fireside
          Pippa Passes
          Christmas-Eve and Easter Day
          Saul

      2. Browning and the Contemporary Scene:
          An Epistle of Karshish
          A Death in the Desert
          Bishop Blougram's Apology
          Caliban Upon Setebos
          Mr. Sludge, the Medium
          Prince Hohen-Stiel-Schwangau, Saviour of Society

      3. Browning's Epic:
          The Ring and the Book

TEXT: (available in paperback)

TIME: Wednesdays, 2:00-3.30 p.m., commencing October 8
      Wednesdays, 2:00-3:30 p.m., commencing January 7

PLACE: Auditorium, Christian Education Building, St. George's-on-the-Hill, Islington, Ontario (Dundas Highway and Wimbleton Road)

FEE: $30.00 — 10 sessions

LITERATURE AND SOCIETY IN THE TWENTIETH CENTURY

J. Hughes

This reading-discussion course concentrates on a selection of writings which reflect and criticize twentieth century society. Most of the works to be studied are novels.

INTRODUCTION: *Adventures of Huckleberry Finn*—Mark Twain

AMERICA: The Roaring Twenties: *The Great Gatsby*—
F. Scott Fitzgerald
The Sun also Rises—
Ernest Hemingway
Babbitt—Sinclair Lewis
The Hungry Thirties: *The Grapes of Wrath*—
John Steinbeck
The American Dream: *Death of a Salesman*—
Arthur Miller
The Private World: *Thurber's Carnival*—
James Thurber
The New Innocence: *Nine Stories*—J. D. Salinger
ENGLAND: Personal Values: *Howard's End*—E. M. Forster
Two Worlds: *Decline and Fall*—Evelyn Waugh
Sons and Lovers—D. H. Lawrence
The Attack on Privilege: *Look Back in Anger*—
J. M. Osborne
Room at the Top—John Braine
*Saturday Night and Sunday
Morning*—Alan Sillitoe
Lucky Jim—Kingsley Amis
CANADA: Early Years: *Sunshine Sketches of a Little Town*
—Stephen Leacock
A Contemporary Problem: *Such is My Beloved*—
Morley Callaghan
The Thirties: *The Watch That Ends the Night*—
Hugh MacLennan
New Canadians: *The Luck of Ginger Coffey*—
Brian Moore
Another Canada: *Son of a Small Hero*—
Mordecai Richler

TEXT: (available in paperback)

TIME: Thursdays, 8:00-9:30 p.m., commencing October 9
PLACE: University College, St. George Campus
FEE: $50.00 — 20 sessions

MODERN DRAMA

I. Hossé

The course will be structured around a discussion of the form and vision of selected modern plays. The theatre of the absurd, the concepts of realism, naturalism, and expressionism will be examined in the light of the specific plays:

Henrik Ibsen: *Brand, Peer Gynt, Rosersholm*
August Strindberg: *Miss Julie, A Dream Play, The Ghost Sonata*
Anton Chekov: *The Cherry Orchard*
Eugene O'Neill: *A Long Day's Journey into Night*
Samuel Beckett: *Waiting for Godot*
T. S. Eliot; *Murder in the Cathedral*

TEXT: (available in paperback)

TIME: Mondays, 2:00-3:30 p.m., commencing October 6
          Mondays, 8:00-9:30 p.m., commencing October 6
PLACE: (afternoon) Islington United Church, 25 Burnhamthorpe Road
          (evening) University College, St. George Campus
FEE: $30.00 — 10 sessions

PRE-UNIVERSITY ENGLISH

J. Aitken
H. Burke
E. Morgan

This course will provide students with an opportunity to survey a broad spectrum of English literature in considerable depth. The minimal programme will include study of about 600 lines of poetry and at least four novels and four plays. Students will have an opportunity, through written assignments and essays, to improve their composition skills.

PREREQUISITES: Students are expected to be familiar with a moderate range of literature and to have completed secondary school English courses to the level of Grade 12. Students who are learning English as a second language are not advised to take this course.

TEXTS: Two selections which should be read before the course commences are *The Scarlet Letter* and *Death of a Salesman*. A list of other required texts will be sent to registrants.

TIME: *Evening*
       Mondays and Thursdays, 7:00-9:00 p.m., commencing September 22
       Mondays and Thursdays, 7:00-9:00 p.m., commencing January 5
       Mondays and Thursdays, 7:00-9:00 p.m., commencing March 2

       Day
       Monday to Friday, 9:00-12:00 noon, July 6 to August 17
PLACE: Teefy Hall, St. George Campus
FEE: $100.00 — 40 sessions

TWENTIETH CENTURY WRITINGS

M. M. Kirkwood

Participants in this course will have an opportunity to survey examples of the work of a number of twentieth century novelists, dramatists and poets. Four sessions will be devoted to novels, four to plays, and two to poetry.

NOVELS:

Conrad — *Heart of Darkness*
D. H. Lawrence — *Sons and Lovers*
Fitzgerald — *The Great Gatsby*
Aldous Huxley — *Point Counter Point*

Hemingway — *A Farewell to Arms*
Faulkner — *Light in August*
Joyce Cary — *The Horse's Mouth*
Hugh MacLennan — *Two Solitudes*

PLAYS:

Ibsen — *The Master Builder*

Chekhov — *The Three Sisters*

O'Casey — *Red Roses for Me*

Tennessee Williams — *The Glass Menagerie*

Arthur Miller — *All My Sons*

Eugene O'Neil — *Long Day's Journey into Night*

Pinter — *The Caretaker*

Albu — *Who's Afraid of Virginia Woolfe*

POETRY:

Selected poems of Yeats, Frost, T. S. Eliot and Dylan Thomas.

TEXT: All the selections listed above may be purchased in paperback editions. Five of the plays are contained in *Six Modern Plays,* Dell Publishing Co.

TIME: Wednesdays, 8:00-9:30 p.m., commencing October 8
PLACE: University College, St. George Campus
FEE: $35.00 — 10 sessions

UTOPIAS — PAST, PRESENT, AND FUTURE   *G. Alderson*

We are now questioning all social institutions, customs, and beliefs. Since Plato, imaginative observers of society have sought to depict an ideal society or to warn of dangerous trends. Participants in this course will discuss the novels, satires, essays or science fiction of such writers as Plato, More, Bacon, Butler, Bellemy, Wells, Huxley, Orwell, Kahn, Ford, Lin Yu-t'ang, Walsh, Goodheart, and McLuhan.

TEXT: A reading list will be provided.

TIME: Mondays, 8:00-9:30 p.m., commencing October 6
PLACE: University College, St. George Campus
FEE: $50.00 — 20 sessions

Management

ADMINISTRATIVE PRACTICES   *R. J. Porter*

The function of the administrator and the general nature of administration are the major subjects to be studied in this series. The first lectures will be devoted to the study of planning, organizing, directing and controlling. Later sessions will deal with administrative techniques employed in management. The emphasis will be on class discussion. Cases, films and an extensive reading list will help to provide background for discussion.

The course is of particular value to owners or managers of medium sized enterprises, and those who have total responsibility for a division of a large corporation.

PREREQUISITE: Practical experience in administration at a relatively high decision-making level is a prerequisite for admission. Students are required to submit a brief resume of experience with application forms.

Registration will be limited to 35 students.

TEXT: W. H. Newman, C. E. Summer, E. K. Warren, *The Process of Management: Concepts, Behaviour, and Practice*, Prentice-Hall, 1967.

TIME: Wednesdays, 6:00-8:00 p.m., commencing October 8
PLACE: 243, Galbraith Building, St. George Campus
FEE: $100.00 — 20 sessions

ADULT LEARNING AND TEACHING   *R. Devlin*

This course is designed for men and women who are involved in the education or training of adults in business, industry, professional and vocational training programmes, educational institutions, religious institutions, government, libraries, armed services, and other organizations.

The members of this course will consider the following topics: setting objectives, the function of the instructor of adults, instructional methods and techniques, evaluation, and some psychological characteristics of adults. Members will be encouraged to relate this knowledge to their own professional responsibilities. The instructor will attempt to use methods suitable for an adult group including reading, brief lectures, discussion, mimeographed handouts, and observation.

Those who wish to receive a letter of recognition in the course will submit a variety of brief written assignments, usually requiring thoughtful reaction to the reading and discussion. There will be no tests and one optional examination.

The only requirement for admission to this course is a desire to increase one's own competence in helping adults learn.

Registration will be limited to 30 students.

TEXT: J. R. Kidd, *How Adults Learn,* Association Press (New York) or G. R. Welch (Etobicoke), 1959.

TIME: Wednesdays, 6:30-8:30 p.m., commencing September 24
PLACE: 314, Galbraith Building, St. George Campus
FEE: $85.00 — 25 sessions

This course may be taken as part of the Manpower Development Certificate Programme.

BUSINESS ADMINISTRATION   *W. A. Dimma*
                                              Course Director

This course encompasses the broad fields of accounting and finance, marketing, manufacturing, personnel relations, and general management. In twenty sessions of two hours each, four lecturers will range across a wide number of the phases of business rather than examine and treat a lesser number of topics more exhaustively. Because the course is aimed primarily at those above, at, or near the middle-management level, a requirement of admission is a general knowledge of business, including at least two years' practical experience. It is recommended that applicants have a minimum educational level of Grade 13 or equivalent, although exceptions will be made for those with at least five years' business experience.

TEXT: A reading list will be provided.

TIME: Tuesdays, 6:00-8:00 p.m., commencing October 7
PLACE: 120, Galbraith Building, St. George Campus
FEE: $50.00 — 20 sessions

BUSINESS MANAGEMENT
J. F. Lowery
S. R. Purcell

This course is designed to give students a knowledge of the many factors involved in the management of a business. The administrative processes of planning, organizing, directing, controlling, staffing, leading and measuring will be examined. Some time will be spent explaining the business operations of the various departments in a company such as finance, personnel, marketing, production, advertising, among others. All aspects that underlie the successful operation of a business organization will be discussed with particular emphasis on the expanding area of computerization and the contributions of the behavioural sciences. Although the course will consist mainly of lectures and discussions, a limited number of case studies will be used.

TEXT: W. H. Newman, C. E. Summer, E. K. Warren, *The Process of Management, Concepts, Behaviour, and Practice,* Prentice-Hall, 1967.

TIME: Mondays, 6:00-8:00 p.m., commencing September 22
        Tuesdays, 7:00-9:00 p.m., commencing September 23
        Wednesdays, 6:00-8:00 p.m., commencing September 24
PLACE: Mondays, D, Faculty of Law, St. George Campus
        Tuesdays, 119, Galbraith Building, St. George Campus
        Wednesdays, D, Faculty of Law, St. George Campus
FEE: $85.00 — 25 sessions

This course may be taken as part of the Fellows' Programme in Banking.

THE MANAGEMENT OF CORPORATE RESOURCES
S. R. Maxwell

This course consists of lectures and selected case studies for middle management dealing with the development of business policies and the nature and concept of business planning. The executive role will be examined from the viewpoint of the rational use of management time in goal-setting, the process of developing plans, organization for planning, and the development of planning tools and techniques in the functional areas of business.

TEXT: J. T. Cannon, *Business Strategy and Policy,* Harcourt, Brace and World.

TIME: Thursdays, 7:00-9:00 p.m., commencing September 25
PLACE: 244, Galbraith Building, St. George Campus
FEE: $100.00 — 25 sessions

CONCEPTS AND USE OF MANAGEMENT SCIENCE   C. D. Sadleir

The objectives of this course are to provide an appreciation of the character and concepts of management science and to discuss the problems of, and

opportunities for, applying management science techniques and implementing resulting solutions in the practical context of business and industry.

The course is designed for those who desire to understand, evaluate and control management science without practising it.

After placing management science in perspective, both historically and professionally, the course will provide an overview of management science methodology. The concept of modeling will be developed and the scope and limitations of mathematical models will be discussed. The models will be related to problem types and illustrated by descriptions of practical applications in the traditional business functions of marketing, production and administration.

The interdisciplinary nature and systems orientation of management science will be examined with reference to such disciplines as the behavioural sciences, engineering, economics and mathematics. The role of the computer as a major management science tool will be explored particularly in the context of the development of management information systems.

At each stage of the evolution of a management science study, problems arise which relate to the decision-makers and to the eventual users of the solution. Throughout the course, every attempt will be made to identify these problems and to suggest alternative means of resolving them. Particular emphasis will be placed on implementation planning and there will be opportunities for group discussion.

REFERENCES: (1) H. A. Simon, *The New Science of Management Decision,* Harper and Bros., 1960. (2) W. E. Duckworth, *A Guide to Operational Research,* Methuen and Co., 1965. (3) P. B. Schoderbek, *Management Systems,* Wiley and Sons, 1967.

TIME: Tuesdays, 7:00-9:00 p.m., commencing October 7
PLACE: 116, Galbraith Building, St. George Campus
FEE: $100.00 — 20 sessions

INDUSTRIAL MANAGEMENT *W. T. Nutson*

This study of the principles and techniques of industrial management divides broadly into two general areas:

An introduction to modern management thought with the subsequent emphasis on people, both manager and those managed, relative to organization research and theory, motivation, incentives and morale, policy formulation, planning and decision making;

A broad introduction to the physical make-up of an industrial organization. In this second category, there will be a discussion of line and staff functions and their interrelationship.

The significance of good control as a function of industrial engineering, production planning and accounting will be amplified.

Registration will be limited to 50 students.

TEXT: W. W. Haynes, J. L. Massie, *Management — Analysis Concepts and Cases,* Prentice-Hall, 1968.

This course may be taken as part of the Manpower Development Certificate Programme.

MANAGEMENT IN THE MANUFACTURING FIRM   P. C. DiNovo

This course deals primarily with the functions of manufacturing management. They are examined in detail to develop an increased understanding of each of the functional areas of a firm and the overall responsibility of the manager. The applicability of some of the latest management techniques and styles to firms with which members of the class are associated will be studied. Cases will be used to show different approaches to solving management problems and participation in discussions will be encouraged.

Topics for discussion will include:

Organization
Budgets and Manufacturing Economics
Capital Investment
Process and Product Design
Method Study and Work Measurement
Industrial Relations
Management Techniques and Styles
Wage and Salary Administration
Computer Applications
Control of Costs, Quality, Inventory and Production

This course is designed for people in professional, supervisory or management positions with limited formal management training seeking to improve their effectiveness.

TEXT: F. Moore, *Manufacturing Management*, 4th ed., Richard Irwin.

MANAGEMENT PRINCIPLES AND   A. I. Hainey
ORGANIZATIONAL BEHAVIOUR   K. W. Preston

This course is intended to be a practical examination of the process of management. The well established principles and practices of management, as well as new insights from the behavioural sciences and decision making theory, are examined, discussed and tested with the view to their practical application in the manager's day-to-day situations.

The course will be divided into three general areas. The first will deal with the theory, principles and practices of the managing process; the various management functions will be reviewed and discussed in a critical manner.

The second area will involve an examination of how recent studies in the field of behavioural science and decision making can apply to management

situations. Macgregor's "x" and "y" theory, Blake's Managerial Grid, Gellerman's Motivation, Argyris' Interpersonal Skills, Likert's Human Assets, and Herzberg's Job Enrichment will be presented and discussed.

Finally, considerable emphasis will be given to practical applications of the subject matter through case studies which will reflect the manager's role in entrepreneurial situations.

TEXT: A reading list will be provided.

TIME: Wednesdays, 6:00-8:00 p.m., commencing September 24
PLACE: 308, Galbraith Building, St. George Campus
FEE: $85.00 — 25 sessions

This course may be taken as part of the Personnel-Industrial Relations Certificate Programme and the Fellows' Programme in Banking. (For those pursuing the Personnel-Industrial Relations Programme, this course must be taken in the final year.)

MANAGING THE COMPUTER FUNCTION   *L. E. S. Green*

The object of this course is to further the continuing effective use of computing resources in meeting organizational objectives in a social milieu associated with rapid technological change, scare skills, firm standards and unfamiliar concepts. Though there will be a brief review of the uses of the computer, this course is intended for senior computing function managers or those about to move into such positions. Among other things, it will be concerned with defining objectives, goals, and other performance measures for computer, programming, and systems organizations. It will be concerned with computer and software selection, as well as selection and training of people to man the equipment. There will be a number of case studies.

TEXT: None

TIME: Thursdays, 6:00-8:00 p.m., commencing October 9
PLACE: 220, Galbraith Building, St. George Campus
FEE: $100.00 — 20 sessions

OFFICE MANAGEMENT   *J. Duffin*

This course is intended for men and women who are seeking a career in office management. It will also be of interest to newly appointed office managers, and to senior general supervisors.

The course is designed to present fundamental principles of modern office technology and to develop the ability of the student to analyse and solve office management problems. Some emphasis is placed upon control of the office environment.

Students will be expected to complete case problem assignments.

Some of the topics to be covered are:

The Concept of Office Work
Authority and Organizational Relationships
Systems and Procedures

Managing in the New Office Technology
Records Management
Supervision in the Office
Controlling: Standards, Time, Cost

Registration will be limited to 50 students.

TEXT: G. R. Terry, *Office Management and Control,* 5th ed., Richard Irwin, 1965.

TIME: Tuesdays, 6:30-8:30 p.m., commencing October 7
PLACE: 107, Galbraith Building, St. George Campus
FEE: $30.00 — 10 sessions

ORGANIZATIONAL PSYCHOLOGY   *K. A. Cassac*

Formal organizations, whether industry, government, hospital, voluntary, etc., are a paramount feature of contemporary life. Much of what takes place within our organizations consists of the behaviour of persons as individuals, members of groups or in relationship to systems. Organizational Psychology concerns itself with the study of that behaviour.

It consists of the theory and research pertaining to organizational behaviour directly as well as those aspects of experimental psychology, social psychology, clinical psychology, sociology, etc., that have relevance to an understanding of organizational life. This course is intended primarily for employees in the personnel field, however interested line managers may also enrol.

Areas dealt with include: significance of formal organizations in our contemporary world, theories of organization and management, models of decision making behaviour, the concept of psychological causality, motivation and personality, perception, interpersonal behaviour, leadership theory and research, power and influence, communication, group and inter-group behaviour, general systems theory, attitude formation, learning theory, problem solving and creativity, adjustment and maladjustment, defense mechanisms, the process of change, and psychological evaluation. Discussion of areas of application will include selection, training, performance appraisal and counselling.

TEXT: H. J. Leavitt, *Managerial Psychology,* University of Chicago Press, 1964 (paperback).

TIME: Thursdays, 6:00-8:00 p.m., commencing September 25
PLACE: 404, Carr Hall, St. George Campus
FEE: $85.00 — 25 sessions

This course may be taken as part of the Personnel-Industrial Relations and the Manpower Development Certificate Programmes.

SMALL BUSINESS MANAGEMENT   *J. W. Hardie*

This course is designed primarily for persons working in companies with less than 100 employees and should appeal to aspiring entrepreneurs. In the initial seven sessions of the course discussion will be focused on balance sheet analysis, forecasting, costing and budgeting controls. Most of the sessions will

be devoted to discussions of various small and new business enterprises in various stages of development to show participants how to identify and solve the problems posed by these case histories. Group reports on an imaginary or real new enterprise in need of founding capital will be reviewed in the final one or two sessions of the course. As class discussions will reflect the opinions and backgrounds of the participants, enrolment is confined to individuals 25 years of age and over with a minimum of five years of business experience, a portion of which preferably should be in the supervisory capacity.

TEXTS: (1) W. A. Hosmer, F. L. Tucker, A. C. Cooper, *Small Business Management: A Casebook,* Richard Irwin, 1966. (2) L. L. Steinmetz, J. Kline, D. Stegall, *Managing the Small Business,* Richard Irwin, 1968.

TIME: Thursdays, 7:30-9:30 p.m., commencing October 9
PLACE: 204, Galbraith Building, St. George Campus
FEE: $80.00 — 20 sessions

EFFECTIVE SUPERVISION   *J. Wainwright*

This course is designed for foremen and supervisors in business and industry who wish to increase their managerial effectiveness. Course content will include: principles of supervision, developing leadership skills, setting operating objectives and standards of performance, discipline, delegation, performance appraisal, communications, motivation, training, hiring, interviewing, handling grievances, employee counselling, job evaluation, wage and salary administration and management of time.

Material will be presented by various methods, including lectures, group discussions, case studies and films.

TEXT: *Leadership on the Job: Guides to Good Supervision,* American Management Association, 1957.

TIME: Tuesdays, 7:00-9:00 p.m., commencing October 7
      Thursdays, 7:00-9:00 p.m., commencing October 9
PLACE: Tuesdays, 405, Carr Hall, St. George Campus
      Thursdays, Scarborough Campus
FEE: $50.00 — 20 sessions

TRAINING AND DEVELOPING PERSONNEL   *A. Joma*
(PRINCIPLES AND METHODS)

Training is a planned dynamic effort to improve the employee's on-the-job performance. Development stresses the expansion of knowledge, skills and experience — the growth of the individual's potential for future responsibility and advancement.

This course concentrates on improved performance and potential. It will stimulate the instructor-trainer, supervisor-manager, or the person who wants to enter these fields, to re-examine his attitudes towards the traditional concept of training. It will help him to recognize and solve specific training problems and, at the same time, force him to take a hard look at existing policies, practices of supervision and the organizational climate — the total job environment as influenced by the technological, economic and social changes in today's business and industry.

This results-oriented course emphasizes up-to-date training concepts and methods: student involvement, group discussions, practice teaching assignments, workshop sessions, and studies of successful programmes in other companies. This way, much of what the trainee will hear and do in the classroom will become immediately useful to him on the job, be it instruction, or supervision, or both.

A wide variety of training methods and aids will be used to learn more about recognizing and relating organizational needs to specific training objectives; the learning-teaching transaction; lesson and programme planning; principles of effective communication; on-the-job training; pre-supervisory and supervisory training courses; manpower-supervisory-management planning and development; performance evaluation; self-development; feedback and evaluation of results; preparation and effective use of: case study, role play, flip charts, films and slides, sound and video tape recordings, overhead transparencies, etc.

TEXT: ASTD, *Training and Development Handbook,* McGraw-Hill, 1967.

TIME: Wednesdays, 7:00-9:00 p.m., commencing September 24
PLACE: 334, East Asian Studies, St. George Campus
FEE: $85.00 — 25 sessions

This course may be taken as part of the Manpower Development Certificate Programme.

Marketing

ADVERTISING AND SALES PROMOTION   G. V. Forster

This course studies the objectives and methods of advertising and promotion together with their place in marketing strategy. Topics are presented from the viewpoint of the potential manager of the advertising and promotion function and include: the role of advertising in marketing strategy, development of advertising strategy and sales promotion strategy, audience identification, message and media selection, advertising evaluation, budgeting, and measurement of results. Case study will also be included.

PREREQUISITE: course "Marketing Management", or equivalent experience

TEXT: None

TIME: Wednesdays, 7:00-9:00 p.m., commencing October 8
PLACE: 102, Falconer Hall, St. George Campus
FEE: $40.00 — 10 sessions

This course may be taken as part of the Industrial Marketing Certificate Programme.

INDUSTRIAL MARKETING

D. I. Gallagher
J. W. Lennard

This course is given for those who are interested in the application of modern marketing techniques to the marketing of industrial products and services. Included are the following topics of study: characteristics of industrial markets, pricing, middlemen and methods of distribution, selling and promotion, product development and diversification, marketing organization, market planning and control.

PREREQUISITE: course "Marketing Management", or equivalent experience

TEXT: R. S. Alexander, J. S. Cross, R. M. Cunningham, *Industrial Marketing,* Richard Irwin, 1961.

TIME: Mondays, 7:30-9:30 p.m., commencing September 22
PLACE: 248, Galbraith Building, St. George Campus
FEE: $85.00 — 25 sessions

This course may be taken as part of the Industrial Marketing Certificate Programme.

INTERNATIONAL MARKETING

D. Simon

For an expanding number of companies the Canadian market is no longer large enough. Global opportunities are constantly opening up and recently Canada has become the fourth largest trading nation in world markets. However, awareness of these opportunities requires a knowledge and understanding of contemporary international markets.

Are international markets different from domestic? Is international marketing a simple continuation of domestic marketing?

Accepting the universal application of marketing principles, the course recognizes that foreign markets present the businessman with a combination of economical, political and social variables different from the domestic market. Some of these variables dominate the foreign market environment and dictate the businessman's overall marketing strategy.

The course focuses on the variables and problems relating to operating institutions as they are found in today's international business world.

TEXT: J. Fayerweather, *International Marketing,* Prentice-Hall, 1965.

TIME: Wednesdays, 6:30-8:30 p.m., commencing October 8
PLACE: 403, Carr Hall, St. George Campus
FEE: $65.00 — 20 sessions

This course may be taken as part of the Industrial Marketing Certificate Programme.

MARKETING MANAGEMENT

D. Simon

This course covers the fundamental elements of marketing within the context of a rapidly changing business environment. Cases are used to complement discussions and lectures to provide an understanding of contemporary

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marketing problems. Emphasis is placed on the development and integration of the overall marketing plan.

CASE BOOK: E. C. Bursk, *Cases in Marketing Management*, Prentice-Hall.

TEXT: E. W. Cundiff, R. R. Still, *Essentials of Marketing,* Prentice-Hall

TIME: Mondays, 6:30-8:30 p.m., commencing September 22
PLACE: 243, Galbraith Building, St. George Campus
FEE: $85.00 — 25 sessions

This course may be taken as part of the Industrial Marketing Certificate Programme.

MARKETING MANAGEMENT R. E. Vosburgh

This course is divided into two parts. The first part examines the major conceptual and technical tools available to marketing managers. The major headings in this section are: analyzing marketing opportunities, decision making, marketing research, and planning. The second part of the course discusses the various facets of a marketing program. The major areas covered are: product policies, pricing, distribution, advertising, sales management, and the evaluation of marketing programs.

The text will serve as background. The class sessions will deal with selected management problems in each of the areas listed.

Discussions will be in the context of business practice as understood in the light of current marketing theories and concepts. Guest speakers, lectures and problems will be used during the year.

The course could serve to up-date those who have had previous marketing courses as well as introduce the field to the serious student of marketing.

TEXT: P. Kotler, *Marketing Management, Analysis, Planning and Control,* Prentice-Hall, 1967.

TIME: Thursdays, 7:00-9:00 p.m., commencing September 25
PLACE: Erindale Campus
FEE: $85.00 — 25 sessions

This course may be taken as part of the Industrial Marketing Certificate Programme.

MARKETING MANAGEMENT W. A. Porter

This introductory course will focus on marketing as a system of business activities. The four emphases will be (1) Analysing Marketing Opportunities, (2) Organizing for Marketing Activity, (3) Planning the Marketing Programme, and (4) Controlling the Marketing Effort.

Part (1) will include the "marketing concept", market segmentation, buyer behaviour (based on new concepts of "role theory"), and market measurement and forecasting.

Part (2) will include business goals and "objectives"; marketing organization; market research, models, and systems; and marketing "creativity".

Part (3) will include product-policy; price, channel, advertising, and sales-force decisions and policy; and discussions on federal law and power in the marketplace.

Part (4) will include marketing control, sales and cost analysis, and the marketing audit.

The course objectives are to:

(a) create an understanding of the behaviour of buyers and sellers in the marketplace, and the role of marketing in corporate strategy;
(b) provide a knowledge of the tools and techniques available to the industrial marketer.

TEXT: P. Kotler, *Marketing Management, Analysis, Planning and Control,* Prentice-Hall, 1967.

REFERENCE: I. A. Litvak, B. E. Mallen, *Marketing: Canada,* McGraw-Hill, 1964.

TIME: Mondays, 6:30-8:30 p.m., commencing September 22
PLACE: 305, Galbraith Building, St. George Campus
FEE: $85.00 — 25 sessions

This course may be taken as part of the Industrial Marketing Certificate Programme.

MARKETING RESEARCH   *A. T. Gamble*

This course is intended for users of research rather than those already deeply involved in the subject — people such as advertising, marketing, or product managers, account executives, or anyone who wants to know how to use and understand this interesting marketing tool that can prevent costly mistakes and waste of money.

The course covers such areas as industry organization, problems that can and cannot be solved with research, techniques in use today, methods of controlling and buying, costs, evaluation of results, etc.

PREREQUISITE: course "Marketing Management", or equivalent experience

TEXTS: Textbooks are not essential, but for those wishing to read, the following are recommended: (1) (General) H. W. Boyd, R. Westfall, *Marketing Research — Text and Cases,* Richard Irwin, 1958. (2) (Statistical) R. Ferber, *Market Research,* McGraw-Hill, 1949.

TIME: Mondays, 7:00-9:00 p.m., commencing January 5
PLACE: 116, Galbraith Building, St. George Campus
FEE: $40.00 — 10 sessions

SALES MANAGEMENT
D. A. Young

Included in this course are the following topics of study: personal selling as a part of the marketing mix, nature of the selling job, recruiting and selecting salesmen, training and development, sales control, compensation, territory allocation and evaluation, sales organization, and co-ordination with related functions.

PREREQUISITE: course "Marketing Management", or equivalent experience

TEXT: B. R. Canfield, *Sales Administration: Principles and Problems,* Prentice-Hall, 1962.

TIME: Tuesdays, 7:30-9:30 p.m., commencing September 23
PLACE: 244, Galbraith Building, St. George Campus
FEE: $85.00 — 25 sessions

This course may be taken as part of the Industrial Marketing Certificate Programme.

Mathematics and Operational Research

LINEAR ALGEBRA AND MATRICES
S. M. Abdelmessih

This course consists of a study of: matrix notions and operations, inversion, determinants, computational methods with matrices and determinants, systems of linear equations, vectors, and vector spaces, eigen value problems, linear programming, linear models, the simplex method, and applications.

Registration will be limited to 50 students.

PREREQUISITE: undergraduate engineering mathematics

TEXT: G. Hadley, *Linear Algebra,* Addison-Wesley, 1964.

TIME: Thursdays, 7:30-9:30 p.m., commencing September 25
PLACE: 304, Galbraith Building, St. George Campus
FEE: $95.00 — 25 sessions.

This course may be taken as part of the Operational Research Certificate Programme.

LINEAR PROGRAMMING AND ITS EXTENSIONS
J. W. Abrams

This course is designed for engineers, operational researchers, and management scientists who wish to be able professionally to apply linear programming and related techniques. Although no previous experience with mathematical programming is required, it will be helpful, as will be a familiarity with matrices and linear algebra.

The course will start from fundamentals and develop and consider in detail such topics as the simplex method, the revised-simplex, the dual-simplex, activity analysis, price relationships, simple and generalized transportation problems, allocation problems, capacitated transportation problems, flows through networks, and branch and bound techniques.

Parametric programming problems and an elementary case of stochastic and integer programming will be treated. A brief introduction to non-linear and dynamic programming will be included. Although emphasis will be placed upon methods of setting up and solving problems, these problems will be related to specific applications and case studies in the literature.

Registration will be limited to 35 students.

TEXT: G. B. Dantzig, *Linear Programming and its Extensions,* Princeton University Press, 1965.

TIME: Tuesdays, 7:00-9:00 p.m., commencing September 23
PLACE: 243, Galbraith Building, St. George Campus
FEE: $95.00 — 25 sessions

This course may be taken as part of the Operational Research Certificate Programme.

INTRODUCTION TO OPERATIONAL RESEARCH   J. W. Abrams
Course Director

This is an elementary course for those who wish to gain a familiarity with operational research by working with some of its more general techniques. It is an introductory course in the sense that it pre-supposes a minimal mathematical background and no other previous acquaintance with operational research.

It is designed principally for those who will encounter operational research in their work and who wish to be able to communicate with practitioners and to evaluate proposals. It will treat the newer quantitative evaluation tools of the manager and demonstrate examples where they can be validly applied.

Operational Research proceeds by setting up mathematical models of physical systems. Manipulation of the model yields insight as to how the physical system would behave if operated under various circumstances thus permitting operations to be improved or "optimized".

The first part of the course will deal with deterministic models, the most important of which is mathematical programming. The latter part will deal with probabilistic models and their application to queueing, inventory theory, and production control. The emphasis throughout will be on concepts, descriptive examples of methods and applications, and not on rigorous mathematical derivations of the theory.

The course may also serve as an introduction to potential practitioners who may wish to apply elementary methods and prepare for subsequent enrolment in the certificate course. It does not afford that sound theoretical basis required for practice, but may serve as a preliminary.

PREREQUISITE: A background of Grade 13 mathematics will be desirable though not essential.

TIME: Wednesdays, 7:00-9:00 p.m., commencing October 8
PLACE: 304, Galbraith Building, St. George Campus
FEE: $75.00 — 20 sessions

PRE-UNIVERSITY MATHEMATICS   *D. Wakfer*

This course is a preparation for university mathematics. It covers most of the topics which are studied in Grade 13 Mathematics A, as well as a few from Mathematics B. The modern approach to mathematics ("New Math") will be emphasized. Students who successfully complete the course will receive a preparation which will be suitable for entering courses for which Mathematics A is a prerequisite.

After a brief introduction to the methods of modern mathematics, the class will undertake a consideration of the number system, algebraic equations and inequalities, and the standard results of analytic geometry. The basic concept of function will be introduced (with particular investigation of exponential logarithmic and trigonometic functions) which leads naturally to a study of calculus.

PREREQUISITES: Students are expected to be able to manipulate algebraic expressions and to solve simple algebraic equations. They should have some familiarity with the results of Euclidean geometry. It is not expected that students will be familiar with the modern terminology of mathematics ("New Math"). Students with less than Ontario Grade 12 Mathematics are advised not to take this course.

TEXT: C. B. Allendoerfer, C. O. Oakley, *Principles of Mathematics*, McGraw-Hill.

TIME: Mondays and Thursdays, 7:00-9:00 p.m., commencing September 22
          Mondays and Thursdays, 7:00-9:00 p.m., commencing January 5
PLACE: Teefy Hall, St. George Campus
FEE: $105.00 — 40 sessions

PROBABILITY THEORY AND   *M. J. Posner*
MATHEMATICAL STATISTICS

This course offers a systematic introduction to modern probability theory and mathematical statistics, and is intended for engineers and practitioners in operational research. It is designed to form a rigorous background for those who desire a thorough course as a preliminary to undertaking advanced work in industrial engineering, operational research, or management science. Subjects to be covered include sample spaces, random variables, probability distributions, characteristic functions, sampling, theory of estimation, regression, and elements of analysis of variance. Familiarity with algebra and the calculus is required.

TEXT: J. Freund, *Mathematical Statistics*, Prentice-Hall, 1962.

TIME: Wednesdays, 7:30-9:30 p.m., commencing September 24
PLACE: 216, Galbraith Building, St. George Campus
FEE: $95.00 — 25 sessions

This course may be taken as part of the Operational Research Certificate Programme.

SIMULATION AND MANAGEMENT MODELING   *C. A. Fuller*

The course presented is a basic, introductory treatment of simulation for the non-expert in either simulation or electronic computer usage. Students are expected to have a working knowledge of Grade 13 mathematics. A knowledge of calculus and elementary probability is desirable. Some exposure to computer languages would be helpful.

Simulation of system behaviour generally requires many calculations, and it is often considered that only electronic computers can carry out this process efficiently. Therefore, time must be spent on basic ideas which arise in computer programming. The language dealt with is GPSS. Treatment of the course material is directed more to discussion and case studies than to lectures. The building blocks of simulation studies which are developed include problem definition, data collection, choice of model, model construction, probabilistic variables, random number generation, choice of output and model verification.

REFERENCE: IBM Manual H20-0304.

TIME: Tuesdays, 7:30-9:30 p.m., commencing October 7
PLACE: 252, Mechanical Building, St. George Campus
FEE: $95.00 — 20 sessions

This course may be taken as part of the Operational Research Certificate Programme.

STATISTICAL DECISION THEORY   *A. A. Cunningham*

This course is designed for engineers, operational researchers, management scientists and those who wish to apply mathematical techniques to decision making. Familiarity with the methods of probability and statistics, such as is acquired through an introductory course, is an essential prerequisite as is calculus. Familiarity with linear algebra and linear programming will be helpful.

After a review of the elements of probability and statistics (events conditional probabilities, characteristics of random variables, important distributions, and sufficient statistics) the course will treat a number of statistical decision problems. In particular, principles used in decision making, states of nature, various decision rules and their comparison, Bayesian decision rules and their computation, and geometrical interpretations will be covered.

Minimax decision rules will be related to linear programming which will be applied in their computation. Approximate minimax decision rules will be treated. Sequential sampling problems will be discussed along with the minimax Wald decision rule and approximations. Methods of handling regular decision over time will be covered. Decision theory models will be applied to estimation and the testing of hypotheses.

REFERENCES: (1) L. Weiss, *Statistical Decision Theory,* McGraw-Hill, 1961. (2) S. Gass, *Linear Programming: Methods and Applications,* McGraw-Hill, 1964. (3) W. Karush, *Lectures on Decision Theory,* Systems Development Corporation, N Sp-1221, Santa Monica, California, 1963.

TIME: Thursdays, 7:30-9.30 p.m., commencing October 9
PLACE: 314, Galbraith Building, St. George Campus
FEE: $95.00 — 20 sessions

This course may be taken as part of the Operational Research Certificate Programme.

INTRODUCTION TO STOCHASTIC PROCESSES   *J. G. Templeton*

This course is designed for engineers, operational researchers and management scientists who wish to acquire a working knowledge of the types of probabilistic models which are currently being applied to problems of business and engineering.

The course will contain a brief review of probability theory, classification of probabilistic models, and a discussion of Markov Processes in discrete and continuous time and space. An introduction to non-Markov Processes will be given. Some consideration will be given to statistical inference and computer simulation in stochastic models. Random walk and queueing models will be discussed.

Applications include problems of machine replacement, reliability, inventory management, storage and maintenance.

Registration will be limited to 35 students.

PREREQUISITES: The course "Probability Theory and Mathematical Statistics", or an equivalent course; mathematical maturity, at the level expected of an engineering graduate. Some acquaintance with operational research procedures is desirable.

TEXT: E. Parzen, *Stochastic Processes,* Holden-Day, 1964.

TIME: Wednesdays, 7:00-9:00 p.m., commencing September 24
PLACE: 310, Mechanical Building, St. George Campus
FEE: $95.00 — 25 sessions

This course may be taken as part of the Operational Research Certificate Programme.

Nursing

The School of Nursing, in co-operation with the Division of Extension, will be sponsoring some eight to ten short nursing courses. Through these continuing education courses, registered nurses can be made aware of new concepts and their applications to nursing services in health care institutions and agencies. Courses will range in length from a few days to several weeks and will offer a variety of topics of interest to all nurses. Details of some of the courses are outlined below. Additional courses will be offered during 1969-70. Included will be courses designed for nurses with teaching and administrative responsibilities.

Further information may be obtained by contacting: Continuing Education for Nurses, Division of Extension. Telephone 928-2400.

ANALYSIS OF THE PROCESS OF PSYCHIATRIC NURSING

This course will enable the nurse to examine the dynamic relationship between patient behaviour and nursing responses in the nurse-patient relationship. It is based on an analysis of the nurse's experience in supervised practice provided in a hospital. The course will consist of two-hour sessions, five days a week for four weeks. Dates will be announced for the spring of 1970.

ASSESSING AND PLANNING FOR NURSING CARE

This programme will be of interest to registered nurses employed in any health care institution or agency. It is designed to enable practising nurses to extend their knowledge of the processes involved in planning nursing care for individual patients. The course will be divided into two parts, one session of three days in October and one session of two days in February.

COUNSELLING THE EMOTIONALLY/MENTALLY DISTURBED PATIENT

This course, designed for public health nurses and occupational health nurses, will be conducted at the Clarke Institute of Psychiatry, and includes interviewing patients, discussions and demonstrations. Two evening courses will be offered, one during September to December and one during January to March. Each course will consist of twelve sessions of two hours per week.

OCCUPATIONAL HEALTH NURSING

This is a five-day course designed for registered nurses with five years or less experience in the practice of occupational health nursing. It presents a broad view of the objectives and scope of an occupational health programme with specific focus on the role and responsibility of the nurse as a member of the occupational health team. Dates will be announced.

REHABILITATION NURSING WORKSHOP

This intensive four-week course is offered annually to registered nurses employed in acute general and chronic illness hospitals, nursing homes, public health agencies and schools of nursing. It exemplifies the scope and role of nursing in a variety of rehabilitation situations and settings. Dates will be announced for the spring of 1970.

Philosophy

GREEK PHILOSOPHY
M. T. Thornton

Cosmology (Theories of the Universe) is a major concern in early Greek philosophy. Students of this course will discuss a major dispute of this period between Heraclitus, who said everything is always changing, and Parmenides, who thought that nothing can really change. Zeno supported Parmenides with his famous paradoxes to show that motion is impossible. The Greek Atomists resolved the dispute by saying that observable objects change, but the atoms of which they consist do not.

In the second part of the course participants will examine Plato's argument for the immortality of the soul; his Theory of Ideas, which says that we cannot know what goodness is from the things we observe, but only from acquaintance with the Ideal Good; and the discussions of Plato and Aristotle on human excellence and happiness.

Throughout, the aim will be to introduce the student to the central ideas of philosophers, rather than to enter into detailed argument. All that is required for the course is an inquiring mind.

It is recommended that students buy the textbook shown below as a sourcebook of readings.

TEXT: R. E. Allen, *Greek Philosophy: Thales to Aristotle,* Free Press/Collier-Macmillan (paperback).

TIME: Wednesdays, 8:00-9:30 p.m., commencing October 8
PLACE: University College, St. George Campus
FEE: $50.00 — 20 sessions

LOGIC AND SCIENTIFIC METHODS
D. L. Mosher

This course is designed to give an understanding of the nature of logical thinking. It will help the student to improve his powers of cogent reasoning and enable him to recognize the difference between good and bad evidence. It will help him to see the difference between persuasion through various psychological means, and rational conviction through evidence and logical reasoning. It will enable him to develop a critical attitude toward the assumptions and presuppositions which form the premises of his own and others' arguments in such fields as ethics, politics and other social sciences, where the facts are not fully verified but contain elements of tradition, preference, and evaluation. It should make him conscious of the ambiguity of words, and the various functions of language.

And, finally, the course will serve as an introduction to the main principles and methods of scientific procedure, such as care in observation, the use of hypotheses, and verification.

TEXT: None

TIME: Tuesdays, 8:00-9:30 p.m., commencing October 7
PLACE: University College, St. George Campus
FEE: $50.00 — 20 sessions

ON BEING TRULY HUMAN   *R. Stackhouse*

Participants in this course will examine the attempts of philosophy, theology, and the social sciences to answer the question: What is required for a truly human existence? Special emphasis will be placed on the rôle of the individual in today's society and on the problem of alienation.

TEXT: None

TIME: Wednesdays, 8:00-9:30 p.m., commencing October 8
PLACE: University College, St. George Campus
FEE: $50.00 — 20 sessions

PHILOSOPHY   *J. M. Wheatley*

This course will trace the development of modern philosophy from the close of the Middle Ages to the end of the eighteenth century. Philosophical thought in the Renaissance, the rise of modern science and its impact on philosophy, continental rationalism and British empiricism, and the philosophy of Immanuel Kant will be examined.

TEXT: None

TIME: Thursdays, 8:00-9:30 p.m., commencing October 9
PLACE: University College, St. George Campus
FEE: $50.00 —20 sessions

POLITICAL PHILOSOPHY   *L. R. Choptiany*

This lecture-discussion course will consist of three segments:

1. Theories of the origin, nature, and value of social and political institutions and practices: Social Contract Theories (Hobbes, Locke, Rousseau); Utiliterianism (Bentham, Mill); Historical Materialism (Marx, Engels); Pragmatism (Dewey).

2. Applications of these theories to actual and proposed modes of social and political organization: Capitalism, Fascism, Socialism, Communism.

3. Applications of the theories to contemporary issues: Social Reform and Revolution, Nationalism, War and Peace.

TEXT: J. Somerville, R. E. Santoni, *Social and Political Philosophy,* Doubleday Anchor (paperback).

TIME: Tuesdays, 8:00-9:30 p.m., commencing October 7
PLACE: University College, St. George Campus
FEE: $50.00 — 20 sessions

Social Sciences

ANTHROPOLOGY: THE STUDY OF MAN
P. C. Hartney

This course will present an introductory overview of physical anthropology. The study of human biology will also be presented with regard to historical prospectives and present importance.

The first segment of the course will deal with the background of contemporary studies, the co-ordination of anthropological research with that of other disciplines, the nature of the materials studied, field and laboratory methods, the manner in which the materials are analyzed, and the interpretations that are made. The second segment will be concerned with the study of man as a member in time and space of the order primates. To be discussed are how long and in what way the order has developed into what it is today.

TEXT: None

TIME: Tuesdays, 8:00-9:30 p.m., commencing October 7
PLACE: 597, Sidney Smith Hall, St. George Campus
FEE: $50.00 — 20 sessions

CONTEMPORARY SOCIAL ISSUES
H. Richardson

How is technology changing man, his body, and his behaviour? The course will discuss changes in man's life caused by developments in the biological sciences. Beginning with new definitions of health and death, it will end with new ideas on sexual behaviour and with the question of further human evolution.

The course is intended for adults who have serious concerns about the effect of technology on human life. It will *not* focus on technical, scientific issues. Rather, it will briefly explain the new technological possibilities that are available to us — going on to consider the practical, moral, and human questions these raise.

For example, what are the various values we must take into account as we decide how to use our new power? What institutional procedures may need to be established in order to insure that these new technologies are used responsibly? How do we ourselves feel about what is happening and how can we adjust to it?

The views of various religious and secular groups will be presented. Class members will be urged to contribute the wisdom of their experiences and engage in discussion. The purpose of the course is not to settle any particular question, but to assist the development of a deeper understanding of the effects of technology and the moral and human issues these effects raise.

The time spent on different topics will vary greatly, but those to be considered include:

New Definitions of Life, Death and Health
Euthanasia and the Care of the Incurably Ill
How Organ Transplants Change our Idea of Man
The Population Explosion and Difficulties in Contraception
Medical Experiments on Humans and The Nuremberg Code
Abortion and the Idea of "Sanctity of Life"
Mental Retardation and Genetic Manipulation
Drugs, Pesticides, and Environmental Toxins
Scientific Study of Sex and Changing Sexual Practices
Changes in the Family and "Feminine Liberation"
The Aged but Not Infirm: A New Social Class
Evolution Beyond Man? Chemistry, Moods, and Consciousness

It is presumed that those enroling will be competent in the open discussion of differing points of view.

TEXT: A reading list will be provided.

TIME: Wednesdays, 8:00-9:30 p.m., commencing October 1
PLACE: 113, Victoria College, 73 Queen's Park, St. George Campus
FEE: $45.00 — 12 sessions

THE FAMILY   *P. M. Butler*

This course will deal with problems associated with marriage and family development in the contemporary Canadian family. Focus will be upon issues which are important for understanding how families are organized and how they cope with changes in the wider society. Topics to be discussed will include the following:

The Social Significance of Marriage
The Nature of Husband-Wife Interaction
Legitimacy and Illegitimacy
The Working Wife and Mother
The Socialization of Children
The Multi-Problem Family
Family Problems Relating to the Aged

No specific textbook will be assigned. Discussions will be organized around readings from journal articles and several of the most recent texts available on the family. Students need not have any previous experience in the study of the family.

This course will be conducted as a seminar; classroom participation will be encouraged.

TEXT: A reading list will be provided.

TIME: Wednesdays, 8:00-9:30 p.m., commencing October 8
PLACE: University College, St. George Campus
FEE: $50.00 — 20 sessions

FOUNDATIONS OF CIVILIZATION

R. Stackhouse

This course is a study of the basic institutions of society — the family, work, law, religion — drawing on what philosophy, theology, and the social sciences have said about them, and making particular reference to the changing rôle of these and related institutions in the modern world.

TEXT: None

TIME: Thursdays, 2:00-3:30 p.m., commencing October 9
PLACE: Wycliffe College, St. George Campus
FEE: $50.00 — 20 sessions

MAN, A SOCIAL BEING

J. Tuck

This course explores the concept of man as a social being. Students examine the concept of "personality"; how personality develops, and the influence of social contacts on this development. The reasons for our behaviour (motivation) and the foundations for our reactions to people or things (attitudes) are studied.

The course also deals with Social Psychology, the study of man in relation to the groups in his social environment. The meaning and effects of group membership and identification are considered.

TEXT: None

TIME: Wednesdays, 8:00-9:30 p.m., commencing October 8
PLACE: University College, St. George Campus
FEE: $55.00 — 20 sessions

MEDIA, MESSAGES, AND HUMAN VALUES

N. MacNeill

This is a non-technical study of the modes and content of various forms of communication and their relationship to spiritual and ethical values held by our society. Extensive use will be made of short film and tape resources, and full opportunity for discussion will be provided. The course is designed to help participants become increasingly aware of how forms of communication and current human values influence each other.

TEXT: A reading list will be provided.

TIME: Mondays, 8:00-9:30 p.m., commencing October 6
PLACE: University College, St. George Campus
FEE: $40.00 — 10 sessions

OTHER CULTURES

P. Rigby

In this course an attempt is made to enter sympathetically into the social life, thought and religion of other cultures, especially African. A comparison of Western and less sophisticated cultures is made to extend our horizons and to

assist us to step outside our own culture, to understand reflexively and with some degree of objectivity our own presuppositions and viewpoint in approaching primitive cultures. Social anthropological, philosophical and theological considerations are discussed.

A detailed analysis of individual, unsophisticated cultures will be undertaken under the following headings:

Classification, Kinship Systems, Social Structure and Function
Marriage, Sex Education, and the Role of Women
Government, Politics, Laws and Economic Organization
Social Change in Primitive Societies
Primitive Religion
Witchcraft, Oracle, Totem, and Taboo
Primitive Thinking and Philosophy

These topics will be analyzed, firstly, from the instructor's own fieldwork experience in Africa (amongst the Mashona people), and, secondly, by examining the fieldwork and philosophical viewpoints of leading anthropologists, to extend the analysis beyond Africa.

TEXT: None

TIME: Thursdays, 8:00-9:30 p.m., commencing October 9
PLACE: University College, St. George Campus
FEE: $35.00 — 10 sessions

PSYCHOLOGY

K. G. Ferguson
H. F. Suligoj
R. C. Smart
J. A. Machry
J. D. Keehn

The aim and methods of psychology, the systematic study of behaviour, human motivation, feelings and emotions, intelligence and intelligence tests, personality and its measurements, social relations, attention, perception, thinking and imagination will be discussed during the first term in this course. In the second term, the instructor will deal with the application of psychological principles to problems of personality and mental hygiene.

TEXT: None

TIME: Mondays, 8:00-9:30 p.m., commencing October 6
Tuesdays, 8:00-9:30 p.m., commencing October 7
Wednesdays, 8:00-9:30 p.m., commencing October 8
Thursdays, 8:00-9:30 p.m., commencing October 9
PLACE: University College, St. George Campus
FEE: $50.00 — 20 sessions

SOCIAL CHANGE

W. M. Gerson

If we were to select one word to describe the world today, the word would be "changing." Social change — significant changes in behavioral patterns — appears to be taking place at an ever-increasing rate for more people in more

countries. The irreversible process of modernization is a continuing, ever-accelerating complex of forces pushing people toward goals that are seldom satisfactorily accomplished or permanently reached.

This course will examine the nature and significance of the conflicts, strains, and social dislocations of today's world from the perspective of sociological theories and concepts. There will be an attempt to show that "sociology is fun" by demonstrating the social analytical use of various theoretical frameworks on substantive examples. Among the topics to be discussed are: the nature of social analysis; the maintenance of social systems; dynamics of social control; conformity and nonconformity; institutionalized deviant behaviour; subcultures; racial and ethnic groups in urban society; invasion, segregation, and assimilation; world population dynamics; violence in North America and the functions of social conflict; the communications revolution: mass communication, popular culture, and mass awareness.

TEXT: M. Gerson, *Social Problems In A Changing World*. New York: Thomas Y. Crowell Company, 1969.

TIME: Tuesdays, 8:00-10:00 p.m., commencing October 7
PLACE: University College, St. George Campus
FEE: $60.00 — 20 sessions

Pre-University Courses

PURPOSES

The Division offers three pre-university courses, Mathematics, Chemistry, and English. They are similar to Grade 13 Mathematics, Chemistry, and English but require the type of performance which will be expected of applicants in the first year of University study in Arts and Science.

These courses are designed to assist persons who wish to become eligible for admission to the University of Toronto as "mature" students. They may also serve as refresher courses for persons who desire preparation for more advanced courses. In addition, the mathematics course is intended to assist students whose graduate study involves the use of statistics and calculus and who feel that they need a stronger foundation in mathematics.

The onus is on students to ascertain the exact requirements of any degree or certificate programme for which they wish to make application for admission. Possession of the minimum published requirements does not ensure selection by the University.

COUNSELLING

Prospective students who wish further information concerning the pre-university courses may telephone 928-5236.

Prior to undertaking one of these courses, students who wish to become qualified for admission to a degree or certificate programme at the University are advised to arrange for a counselling interview with a member of the counselling staff of the Division's Degree and Certificate Courses Section. An appointment may be arranged by telephoning 928-2405.

(For details of each course, refer to the descriptions elsewhere in this calendar.)

Preparation of Teachers in Pre-School Education

The University of Toronto, in co-operation with the Nursery Education Association of Ontario, offers a three-part course entitled Preparation of Teachers in Pre-School Education. This course is designed to prepare the student for working with the pre-school child in nursery schools and day nurseries. It is divided into three parts which must be taken in order. Part I requires nine weeks of full-time study. Part II requires six weeks of full-time study. Part III is undertaken by evening classes, but requires some school visits and practical work during the academic year. The student may work as an assistant in a nursery school or day nursery between Parts I and II and during Part III, thus gaining valuable experience in the field of pre-school education.

UNIVERSITY OF TORONTO
CAMPUS LOCATIONS

Co-ordinated Programmes

INDUSTRIAL MARKETING PROGRAMME

THE PROGRAMME

Today, if corporations aim to outlive the markets on which they were founded, a marketing orientation must replace the older production and finance and sales orientations in the business planning process. There is substantial need and opportunity, particularly in industry, for men and women who are skilled in finding the new products and services, new roles, new customers, and new markets which are vital to the preservation and growth of dynamic, competitive, profitable organizations.

This Industrial Marketing Programme has been designed to provide a firm theoretical and practical base for individuals who choose to increase their professional knowledge and competence in the marketing function in general and in industrial marketing in particular. Registrants must be capable of handling work at the university undergraduate level to profit from the courses.

A certificate of achievement will be awarded by the INDUSTRIAL MARKETERS OF TORONTO upon successful completion of the required courses as outlined below under the heading "The Certificate."

ADMISSION TO THE PROGRAMME

Applicants:
(a) must be able to meet the general admission requirements of the University of Toronto, or
(b) must be of mature age (25) and have obtained a minimum of 60% in at least one grade 13 subject, or
(c) must be of mature age (25) with suitable experience in the fields covered by the programme.

THE CERTIFICATE

Candidates for the certificate:
(a) must be employed in industrial sales or marketing or related work, and
(b) must attain a "C" grade (i.e. 60%) or better in at least 4 of 6 full courses or equivalents and a pass in all of them, and
(c) must make application to the Industrial Marketers of Toronto enclosing a statement of their programme records and grades, as prepared by the Division of Extension, University of Toronto.

COURSES

Obligatory
Marketing Management
Industrial Marketing
Sales Management
Advertising and Sales Promotion (half course)

Optional
Economics — An Introduction
Communications
International Marketing
Budgetary Controls (half course)

(For details of each course, refer to the descriptions elsewhere in this calendar.)

OPERATIONAL RESEARCH PROGRAMME

THE PROGRAMME

This programme is designed to provide a familiarity with the variety of techniques used by practitioners in the field of operational research. It will give students an adequate background for advanced specialist studies and will give persons in supervisory and management positions a working appreciation of techniques used in daily applications of operational research. The level of the courses is that of advanced undergraduate and graduate university instruction. In recognition of the level of achievement, those successfully completing the programme will be granted a certificate by the CANADIAN OPERATIONAL RESEARCH SOCIETY.

ADMISSION TO THE PROGRAMME

Applicants:
(a) must be able to meet the general admission requirements of the University of Toronto, or
(b) must be of mature age (25) and have obtained a minimum of 60% in at least one grade 13 subject, preferably mathematics, or
(c) must be of mature age (25) with suitable experience and background in the fields covered by the programme.

THE CERTIFICATE

Candidates for the certificate:
(a) must attain a "C" grade (60%) or better in at least four of the six courses and a pass in all of them, and
(b) must make application to the Canadian Operational Research Society.

COURSES

Linear Algebra and Matrices
Linear Programming and its Extensions
Probability Theory and Mathematical Statistics
Introduction to Stochastic Processes
Statistical Decision Theory
Simulation and Management Modeling

(For details of each course, refer to the descriptions elsewhere in this calendar.)

MANPOWER DEVELOPMENT PROGRAMME

THE PROGRAMME

The Manpower Development Certificate Programme is a co-ordinated programme of courses designed to help people in organizations understand and develop the training function. It is intended for those directly involved in the task of planning and organizing employee training and manpower development.

The programme is for students who are capable of taking courses at the university undergraduate level.

A certificate of achievement will be awarded by the ONTARIO SOCIETY FOR TRAINING AND DEVELOPMENT upon successful completion of six full courses or equivalents as outlined below under the heading "The Certificate."

ADMISSION TO THE PROGRAMME

Applicants:
(a) must be able to meet the general admission requirements of the University of Toronto, or
(b) must be of mature age (25) and have obtained a minimum of 60% in at least one grade 13 subject, or
(c) must be of mature age (25) with suitable experience in the fields covered by the programme.

THE CERTIFICATE

Candidates for the certificate:
(a) must be employed in personnel work, training programmes or related work, and
(b) must attain a "C" grade (i.e. 60%) or better in at least 4 of 6 full courses or equivalents and a pass in all of them, and
(c) must make application to the Ontario Society for Training and Development enclosing a statement of their programme records and grades, as prepared by the Division of Extension, University of Toronto, and a certification fee of $10.00.

COURSES

Obligatory

Organizational Psychology
Adult Learning and Teaching
Training and Developing Personnel (Principles and Methods)
Communications
Industrial Management

Optional

An Overview of Personnel Administration (half course)
Statistics and Individual Differences (half course)
Interviewing and Counselling
Human Relations and Human Organization

(For details of each course, refer to the descriptions elsewhere in this calendar.)

PERSONNEL-INDUSTRIAL RELATIONS PROGRAMME

THE PROGRAMME

This programme is designed to provide basic training in the fundamentals of personnel and industrial relations for practitioners in this field who wish to improve their qualifications and competence. There will be an emphasis throughout the programme on the analysis and application of industrial relations and personnel principles to practical problems.

The programme has been designed for students who are capable of taking courses given at the university undergraduate level.

Upon successful completion of the required courses as outlined below, a certificate of achievement will be awarded by the PERSONNEL ASSOCIATION OF TORONTO or, in the case of civil servants, by the PUBLIC PERSONNEL ASSOCIATION.

ADMISSION TO THE PROGRAMME

Applicants:
- (a) must be able to meet the general admission requirements of the University of Toronto, or
- (b) must be of mature age (25) and have obtained a minimum of 60% in at least one grade 13 subject, or
- (c) must be of mature age (25) with suitable experience in the fields covered by the programme.

THE CERTIFICATE

Candidates for the certificate:
- (a) must be employed in personnel or related work, and
- (b) must attain a "C" grade (i.e. 60%) or better in at least 4 of the 6 courses and a pass in all of them, and
- (c) must make application to the appropriate association, enclosing a statement of their programme records and grades, as prepared by the Division of Extension, University of Toronto, and a certificate fee of $10.00.

COURSES

Economics — An Introduction
The Personnel Function
The Economics of Labour Relations
Organizational Psychology
Labour Relations
Management Principles and Organizational Behaviour

(For details of each course, refer to the descriptions elsewhere in this calendar.)

FELLOWS' PROGRAMME IN BANKING

THE PROGRAMME

The Fellows' Programme in Banking is a co-ordinated programme of ten courses designed specifically for staff members of Canadian chartered banks. Its purpose is to provide formal education for men and women who wish to prepare themselves for responsible positions in banking.

This programme is for students who are capable of taking courses at the university undergraduate level.

A certificate of achievement will be awarded by the INSTITUTE OF CANADIAN BANKERS upon successful completion of the required courses as outlined below under the heading "The Certificate."

ADMISSION TO THE PROGRAMME

Applicants:
(a) must be able to meet the general admission requirements of the University of Toronto, or
(b) must be of mature age (25) and have obtained a minimum of 60% in at least one grade 13 subject, or
(c) must have demonstrated sufficient ability and potential at their present work to secure the recommendation of the Institute of Canadian Bankers.

Candidates for admission to the programme should apply through the personnel department of the bank in which they are employed.

THE CERTIFICATE

An award will be granted by the Institute of Canadian Bankers upon successful completion of each part of the programme as follows:
Part I   Letter of Accomplishment
Part II   Certificate of the Institute; Status of Associate Member
Part III Title of "Fellow of the Institute"

REGISTRATION

Registration for particular courses of this programme should be submitted through the personnel department of the bank in which the student is employed. Enrolment requests should reach the Division of University Extension by September 19, 1969, at latest. Early application is advised.

Students may enrol in no more than two courses in the same session. Each part of the programme must be completed successfully before proceeding to a subsequent part.

COURSES

Part I
Year I Courses
    The Banker and Society
    Business Management

Part II
Year 2 Courses
    Financial Analysis and Control
    Communications
Year 3 Courses
    Economics
    Legal Aspects of Business

Part III
Year 4 Courses
    Business and Personal Finance
    Management Principles and Organizational Behaviour

Year 5 Courses
    Business Policy
    One optional course

(For details of each course, refer to the descriptions elsewhere in this calendar.)

Special Programmes for Associations

Four additional programmes are conducted by the Division of Extension for outside organizations. These lead to recognized professional designations. Further details of each programme are available from the appropriate organization as indicated below.

CERTIFICATE COURSE IN ADMINISTRATIVE MANAGEMENT

The administrative manager is concerned with the efficient performance of the administrative function and, therefore, must have a wide knowledge of business. This course is a combination of business principles and applications, and is designed for mature men and women in business, industry, and the civil service, who wish to prepare themselves for the position of Administrative Manager.

There are eight subjects in this programme, the first six of which are similar to those given in the Certificate Course in Business of the University. These must be taken by all interested in this programme or some equivalents which are acceptable to the ADMINISTRATION MANAGEMENT SOCIETY. A formal certificate of achievement will be awarded by the ADMINISTRATIVE MANAGEMENT SOCIETY. Applicants may then apply for membership in the affiliated organization, Associated Office Administrators of Ontario. They will be asked to include evidence of appropriate experience in the practice of office management. The minimum experience required is five years' employment in an office immediately prior to applying for membership, with the most recent two years occupied in a supervisory capacity. Other practical experience which can be regarded as the equivalent of this will also be considered. Admission to membership in this association entitles the graduates of the four-year course to use the designation C.A.M. (Certified Administrative Manager).

1st Year — Accounting, Economics
2nd Year — Business Organization, plus one subject from optional list
3rd Year — Two subjects from optional list
Optional — Business Finance, Business Law, Marketing, Data Processing, Production, Statistics, Personnel
Graduates of this course or holders of a B. Comm. degree may register for the fourth year.
4th Year — Information and Communication Systems, Personnel Practices and Concepts for Managers and Supervisors

Information may be obtained from the Division of Extension.

(For details of fourth year courses, refer to the descriptions elsewhere in this calendar.)

CERTIFICATE COURSE IN INDUSTRIAL MANAGEMENT AND ADMINISTRATION

THE CANADIAN INDUSTRIAL MANAGEMENT ASSOCIATION is chartered in the Provinces of Ontario, Quebec and Manitoba to conduct a course in Industrial Management and Administration, and to grant to students who successfully complete this course the Association's status as "Certified Industrial Manager" with the designation "C.I.M." — limited to graduates who maintain membership status in the Association.

The material presented during the course has been selected to fill the requirements of many Canadian industries, and is periodically reviewed in detail by industrial and educational leaders in the Provinces. The method of instruction employs both lectures and case discussions, thus affording the student the valuable experience of meeting practical problems and expressing his opinions to other class members through open debate and discussion of assigned problems. Meeting men from other industries during class discussions provides an insight into alternative approaches to industrial problems.

Many companies use this course effectively for systematically training candidates for more advanced managerial positions. Others have found that it provides an appreciation of all management functions for technical men in such fields as quality control, design engineering, industrial sales, and production planning.

1st Year — Business Organization, Accounting
2nd Year — Engineering Economics, Industrial Engineering
3rd Year — Manufacturing Controls, Marketing
4th Year — Industrial Relations, Cases and Problems in Administration

St. George Campus — complete programme
Scarborough Campus — first, second and third years
Erindale Campus — first and second years

Information pertaining to educational requirements, fees and registration may be obtained from the Canadian Industrial Management Association, 51 Eglinton Avenue East, Room 304, Toronto 12, Telephone 485-5747.

INDUSTRIAL ACCOUNTANTS PROGRAMME

The designation R.I.A. (Registered Industrial Accountant) is a qualification awarded by the provincial SOCIETIES OF INDUSTRIAL ACCOUNTANTS and is recognized throughout business and government as the mark of a thoroughly trained and competent management accountant. To achieve it students must successfully complete a five-year programme of studies.

The programme is designed to provide a thorough basic training in the skills of management accountancy. When all the annual examinations have been passed the student receives a diploma, the right to use the R.I.A. designation after his name, and becomes eligible for full S.I.A. membership privileges, including voting rights. The only other provisos are four years' practical experience and the sponsorship of two registered members.

1st Year — Accounting Fundamentals, Industrial Legislation
2nd Year — Accounting II, Managerial Statistics, Report Writing

3rd Year — Advanced Accounting, Industrial Organization and Management
4th Year — Cost Accounting and Systems, Auditing
5th Year — Cost and Management Accounting

St. George Campus — complete programme
Scarborough Campus — first, second and third years
Erindale Campus — first, second and third years

Information pertaining to educational requirements, fees, and registration may be obtained from The Society of Industrial Accountants of Ontario, Room 1020, 25 Adelaide Street East, Toronto. Telephone 363-8191.

CHARTERED ACCOUNTANTS PROGRAMME

The INSTITUTE OF CHARTERED ACCOUNTANTS OF ONTARIO has established a programme of summer schools for university graduates enroled in its course leading to qualification as a Chartered Accountant.

The objective of the Institute's educational programme is to develop a professional accountant, competent to practise public accounting. The course of studies, combined with practical experience, provides not only the special skills in accounting and related disciplines needed for public practice, but also covers many of the areas of knowledge of business administration required for modern management.

The summer schools provide an academic atmosphere in which students can devote full attention to their professional studies, free from the preoccupations of home and office. Distinguished instructors, drawn from universities and the accounting and law professions, will conduct lectures, case studies and discussion groups. Attendance at summer school is compulsory for all university graduates, except Bachelors of Commerce, entering the profession after 1968.

For information, contact the Institute of Chartered Accountants of Ontario, 69 Bloor Street East, Toronto 5. Telephone 927-1841.

URBAN & REGIONAL STUDIES

There is increasing public interest in and concern about the quality of the environment in which we live. To preserve and improve this environment, planning and control in the city and the region are essential.

Regretably, in the past, planning and control with respect to the physical environment have often been ignored or inadequate. Many social, economic, aesthetic and cultural problems have resulted. And, too frequently, we have attached more importance to and have expended more of our resources on the treatment of these problems, symptoms of a poorly planned, inadequately controlled physical environment, than we have on removing the causes by improving the environment.

The Division of Extension has developed a series of individual courses dealing with the city and the region. Those who have a professional interest, or interested, informed laymen will have opportunities to study and explore current researches, theories, and examples with authorities in the field. Offered over a period of two or three years, the series will provide an ongoing programme of

studies which students may attend as a whole or in part. Not all of the courses will be available in any one year.

The following courses are offered this year:

Studies of Contemporary Urban and Regional Planning
Urban Renewal and Housing Problems
Natural Resources and their Management
Urban and Regional Information Systems
(Descriptions of these courses are to be found in this calendar.)

Other courses scheduled for future years are:

The History of Cities
Urban Transportation Systems
Citizen Participation in Community Planning
Problems of Metropolitan Planning
Planning a New Town in Ontario
The Quality of the Environment and the Appearance of Cities
Pollution Control

St. George Campus

Correspondence Courses

INTRODUCTION

For over forty years correspondence courses have been part of the University's extension programme, and thousands of men and women in Ontario and in other provinces have qualified for designations or certificates offered by various institutes and associations for completion of educational programmes in which the courses are included. Other universities, government departments and the Canadian forces have also utilized the correspondence courses.

Individual courses are now available by direct enrolment, without affiliation with any sponsoring organization. This provides an opportunity for continuing educational development for those who wish to pursue independent study in any of the subjects available in our programme.

Supervised annual examinations are conducted in centres throughout Canada and abroad, and statements of examination results are furnished either to sponsoring organizations or to candidates. The correspondence courses do not lead to academic credit toward degrees, diplomas or certificates awarded by the University of Toronto.

SPONSORED PROGRAMMES

The rôle of the sponsoring organizations involves much more than conferring appropriate recognition for prescribed attainments. Providing or arranging for necessary preliminary training and specialized courses; counselling prospective students; arranging for local contacts among students and graduates; seminars and meetings; special publications; assistance with career advancement — all these activities and many others are typical of those undertaken by the organizations listed below. Each organization maintains arrangements by which it enrols students for correspondence courses conducted by the Division of University Extension, and all students thus enrolled become subject to the general arrangements by which the courses are conducted.

Since each sponsoring organization has its own more specialized requirements concerning such matters as admission standards, fees, closing dates for enrolment, course completions, exemptions or credits for prior academic attainments, and regulations governing designations and certificates awarded, it is essential that preliminary enquiries concerning any of these programmes be directed to the appropriate address listed below so that complete information may be provided:

The Association of Administrative Assistants
c/o Miss M. Martin, 155 College St., Toronto 2B, Ont.

The Canadian Credit Institute
6 Crescent Rd., Toronto 5, Ont.

The Canadian Institute of Realtors
20 Eglinton Ave. E., Toronto 12, Ont

The Canadian Institute of Traffic and Transportation
Suite 2011, Victoria Tower, 44 Victoria St., Toronto 1, Ont.

The Chartered Institute of Secretaries
119 Adelaide St. W., Toronto 1, Ont.

The Chemical Institute of Canada
Suite 906, 151 Slater St., Ottawa 4, Ont.

The Engineering Institute of Canada
700 E.I.C. Building, 2050 Mansfield St., Montreal 110, P.Q.

The International Association of Personnel in Employment Security
c/o Mr. Scott Boyd, Executive Director, Box 173, Frankfort, Kentucky 40601, U.S.A.

The Ontario Association of School Business Officials
Suite 401, 3101 Bathurst St., Toronto 9, Ont.

The subjects included in each programme are shown on the chart on page 116; course descriptions begin on page 117. The fees shown do not apply to sponsored enrolments.

DIRECT ENROLMENT

The course descriptions which follow will be of particular interest to persons who wish to pursue their own specific educational goals by correspondence study. The fee shown for each course covers the cost of correspondence tuition, study guides, stationery, and a supervised final examination. The fee does not include the cost of the required texts, which must be purchased separately.

Since some courses have been developed as parts of a planned sequence, particular attention should be given to any information provided concerning prerequisites or specialized background knowledge required. For obvious reasons, *facility in written English* is a general prerequisite.

Further information and enrolment forms will be provided upon request. Please write, specifying the course or courses in which you are interested, to:

> Correspondence Courses
> Division of University Extension
> 84 Queen's Park
> Toronto 5, Ontario.

The correspondence courses do not lead to credit toward any degree, diploma, or certificate awarded by the University of Toronto. A statement of examination results will be provided, but this is in no sense a certificate or diploma.

The required and recommended texts may be ordered by mail from the University of Toronto Textbook Store, 34 Bancroft Street, Toronto 5. (Please do not send textbook orders to the Division of University Extension.)

SPONSORED PROGRAMMES — CORRESPONDENCE COURSES

Compulsory Course

Option

* Other courses also required

Association of Administrative Assistants
Canadian Credit Institute—M.C.I.
Canadian Credit Institute—Graduate Award
Canadian Institute of Traffic and Transportation
Ontario Association of School Business Officials
International Association of Personnel in Employment Security
Canadian Institute of Realtors (Final courses only)
Chartered Institute of Secretaries*
Canadian Forces College—Graduate Assistance Programme*
Engineering Institute of Canada
Chemical Institute of Canada

Accounting — ACCOUNTING
SCHOOL FINANCE AND ACCOUNTING
Administration — BUSINESS ORGANIZATION
ADMINISTRATION
MARKETING
TAXATION (Income Tax)
CREDIT MANAGEMENT
Economics — INTRODUCTORY ECONOMICS
TRANSPORTATION ECONOMICS
INTERNATIONAL ECONOMICS
MANAGERIAL ECONOMICS
LABOUR ECONOMICS
REAL PROPERTY VALUE
REAL PROPERTY ANALYSIS
Education — HISTORY & PHILOSOPHY OF EDUCATION
English — ENGLISH COMPOSITION
ENGLISH LITERATURE
Geography — ECONOMIC GEOGRAPHY
CANADIAN GEOGRAPHY
Law — COMMERCIAL LAW
COMPANY LAW
TRANSPORTATION LAW
SCHOOL LEGISLATION
QUEBEC CIVIL CODE
Mathematics — MATHEMATICS FOR MANAGEMENT
Political Science — DEMOCRATIC GOVERNMENT IN CANADA
MODERN POLITICAL IDEAS
Psychology — PSYCHOLOGY
SOCIAL PSYCHOLOGY (Individual in Society)
HUMAN RELATIONS
Statistics — BUSINESS STATISTICS

Mathematics
Operational Research
Engineering

CALCULUS, DIFFERENTIAL EQUATIONS,
LINEAR ALGEBRA, PROBABILITY & STATISTICS,
COMPUTER PROGRAMMING, NUMERICAL
ANALYSIS, LINEAR PROGRAMMING,
OPERATIONS RESEARCH METHODS,
MANAGEMENT SCIENCE,
CONTROL SYSTEMS, VIBRATION ANALYSIS

ACCOUNTING

This introduction to the theory and practice of accounting should enable persons in business to understand and interpret the results of business activities as reflected in financial statements. It is not intended to provide a foundation on which a potential accounting specialist could build a specialized mastery of accounting techniques, but rather to provide sufficient understanding of the basic principles and practices to enable non-accountants to use conventional accounting data effectively. Accordingly, only sufficient time is devoted to the mechanics of bookkeeping as is necessary to provide an understanding of the source and significance of accounting data and the greatest emphasis is on the use of financial reports as a guide to administrative action and as a means of control.

The course covers general accounting fundamentals, including standard bookkeeping practices and basic accounting concepts and terminology. In addition, it includes an introduction to cost accounting and budgetary control as well as a brief discussion of the basic principles of income taxation. A substantial portion of the course is devoted to the analysis and interpretation of financial statements, including the development and significance of the conventional ratios, and business valuation.

TEXT: E. E. Easton, B. L. Newton, *Accounting and the Analysis of Financial Data,* McGraw-Hill.

FEE: $80.00

ADMINISTRATION

This course is intended to provide a general introduction to administration, both for students who already have supervisory responsibilities and for those who have not yet had such experiences. Two assumptions are made: first, that the student has a serious interest in the means whereby organized human activity is carried on efficiently and productively; and, second, that he has current opportunity to observe the functioning of one or more organizations. The assignment questions and case studies have been selected to bring to the student some appreciation of the wide range of the administrator's responsibilities, the variety of his activities, and the importance of well-integrated group effort.

Following the pattern of the selected text, the main topics are considered in the following sequence: organizing; structural design; human factors; planning; decision making in an enterprise; leading; measuring and controlling.

TEXT: W. H. Newman, C. E. Summer, E. K. Warren, *The Process of Management,* Prentice-Hall.

FEE: $80.00

BUSINESS ORGANIZATION

It is the aim of this course to give a better understanding of how organizations work. At times, the main emphasis is upon business organization. But most organizations, whether organized for profit, service, or other reasons, operate in very much the same ways. The principal concern of the course is with the management of organizations; however, a proper understanding of managerial

responsibilities necessitates a like awareness of the attitudes and interests of the other participants in an organization.

This approach to the study of organization begins with the analysis of its essential components so that integrated patterns, principles and, ideally, a philosophy may be developed and examined critically.

The assignments are designed to assess appreciation of the texts and other reading, independent thinking on the subject, and problem-solving and report-writing.

TEXTS: (1) W. H. Newman, C. E. Summer, E. K. Warren, *The Process of Management,* Prentice-Hall. (2) H. Koontz, C. O'Donnell, *Management: A Book of Readings,* McGraw-Hill. (3) P. Drucker, *The Practice of Management,* Harper.

FEE: $80.00

BUSINESS STATISTICS

An introductory outline of basic concepts and techniques in modern statistical analysis. Applications emphasize the specific field of business, but the same principles underlie statistical methods in other fields of knowledge.

Topics considered include collection, tabulation and pictorial representation of data, frequency distributions, averages, measures of variation, probability, sampling, linear regression, index numbers and time series (secular trend, seasonal and cyclical variations).

PREREQUISITE: High school algebra or equivalent mathematical knowledge is desirable.

TEXT: J. E. Freund, F. J. Williams, *Modern Business Statistics,* Prentice-Hall.

FEE: $80.00

CALCULUS (MATHEMATICS II)

Intended as a refresher course, this review of differential and integral calculus covers differentiation, the indefinite integral, the definite integral, applications of integration to physics, vectors, partial differentiation, multiple integrals, infinite series, differential equations and partial differential equations.

TEXT: G. B. Thomas, *Calculus,* Addison-Wesley.

FEE: $80.00

CANADIAN GEOGRAPHY

Although the major part of the course is concerned with the economic geography of Canada, there is also some emphasis on study of physical, historical, and political factors.

Land forms and climate are studied first; the sections devoted to economic geography consider in turn non-agricultural primary industries, comparative methods as applied to agriculture in different regions of Canada, economic de-

velopment and industrial structure. The final part of the course is a study of the basis of Canadian urban life through the examination of some significant relationships and theories of urban development.

(Availability, texts, and fee to be announced)

COMMERCIAL LAW

An introduction to the legal principles involved in business, this course also serves as a foundation for specialized courses based upon legislation.

After an introduction which outlines the sources of our law, the structure of the courts, and constitutional law, the main sections of the course deal with the law of real property; the law of contract; transfer of interest in some forms of personal property; negotiable instruments; the law of agency; company law; bankruptcy; the law of trusts; wills and intestacy, and the law of tort.

TEXT: F. R. Hume (Editor), *Anger's Digest of Canadian Law,* Canadian Law Book Co. OR J. E. Smyth, D. A. Soberman, *The Law and Business Administration in Canada,* Prentice-Hall.

FEE: $80.00

COMPANY LAW

The introductory section of this course deals with the general topic of corporations, and the distinctions between companies and other forms of organization, such as partnerships. Succeeding sections deal with the creation of companies, letters patent, differences between public and private companies, share structure, shareholders' rights and liabilities; transfer of shares; operation of companies, by-laws, qualifications, duties and powers of directors; conflict of interest, officers, auditors, dividends, annual returns and summaries; changes in corporate structure, supplementary letters patent, amalgamations and mergers, compromises and arrangements; termination of corporate existence, voluntary and involuntary winding-up, surrender of charter and cancellation of charter. The final sections are concerned with borrowing by companies, raising additional capital and the functions of the exchanges.

The course will deal only with the Canada Corporations Act, The Corporations Act of Ontario and The Securities Act of Ontario. For comparative purposes, students resident in provinces other than Ontario should also obtain copies of their provincial legislation relating to companies.

PREREQUISITE: A course in business or commercial law

FEE: $80.00

COMPUTER PROGRAMMING (FOR ENGINEERS)

This course is intended to acquaint engineers with the methods of programming problems to run on electronic digital computers. The main material of the course is to be found in *A FORTRAN IV Primer,* by Elliott I. Organick (Addison-Wesley, 1966).

This book is provided along with notes which lay out a plan of study, introduce supplementary problems, and divide the course into five units. At the end of each unit problems are submitted for marking and to be run on the IBM 7094 II computer at the Institute of Computer Science, University of Toronto.

Although it is essential to practise coding and programming in order to learn them, in most computer installations programmers have no direct access to the machines. Thus it is not unrealistic to have those learning to program submit codes which are punched, run, and returned with whatever results the machine produces, along with the diagnostic notations. The problems are then corrected, resubmitted to the computer and so on until the programs work. In this way, those taking the course have essentially the same advantages possessed by students who have at their disposal a computer for laboratory work.

PREREQUISITE: No previous knowledge of computers is assumed, but it is expected that those taking the course will have had two years of engineering mathematics.

FEE: $135.00

CONTROL SYSTEMS

This course is a study of the analysis and design of feedback control systems. It is intended to be equally suitable for all branches of engineering.

The principal topic is the analysis and design of linear control systems. It is expected that students will devote more than half of the total time to this topic. The remainder of the course comprises a study of the characteristics of nonlinear control systems, and the phase plane method and the describing function technique for analysis; an introduction to sampled data and digital control systems; a general introduction to computer control of processes and to modern developments in theory and applications.

PREREQUISITE: A knowledge of linear differential equations and Laplace transforms is required.

TEXT: S. M. Shinners, *Control System Design,* Wiley and Sons.

FEE: $80.00

CREDIT MANAGEMENT

For the student with a good basic knowledge of current credit and collection procedures and a grounding in administration theory, this course will provide an opportunity to study some important aspects of credit management at an advanced level, and to relate principles and practice through consideration of case problems.

The main sections of the course will deal with the organization of the credit department; the credit decision; planning and objectives in credit management; measurement and control; and customer counselling. The sequence of topics is intended to facilitate the application of the appropriate administrative principles in the study of credit management, but throughout the course the student should strive to develop and extend his understanding of the broad implications of credit for the firm, the industry and the economy as a whole.

PREREQUISITE: The student must be familiar with current credit and collection procedures and administration theory.

TEXTS: (1) W. J. Schultz, H. Reinhardt, *Credit and Collection Management,* Prentice-Hall. (2) *The Bankruptcy Act, the Privileges, Protection and Rights of Creditors,* C.C.I. Library of Credit Reference Booklet #3. (3) W. H. Newman, C. E. Summer, E. K. Warren, *The Process of Management,* Prentice-Hall.

FEE: $80.00

DEMOCRATIC GOVERNMENT IN CANADA (POLITICAL SCIENCE)

This course discusses the constitution of Canada and the parliamentary system, comparing both with their parallels in Britain and the United States. The structure of the courts and the role of the judiciary are outlined. The distribution of powers between the federal and provincial governments is discussed, as are the problems which consequently arise, especially federal-provincial relations and the difficulty of amending the constitution. The course considers in turn: the executive (the Governor-General, the cabinet and the civil service); the legislature (the House of Commons and the Senate); and the political parties and their functioning.

TEXTS: (1) R. M. Dawson, *The Government of Canada,* University of Toronto Press. (2) J. A. Corry, J. E. Hodgetts, *Democratic Government and Politics,* University of Toronto Press.

FEE: $80.00

DIFFERENTIAL EQUATIONS (MATHEMATICS III)

The main topics included in this refresher course include first order differential equations; second and higher order linear differential equations, operational methods and variation of parameters; simultaneous differential equations, relation between operators and the Laplace transform; series solutions, Bessel functions; partial differential equations; boundary problems and Fourier Series.

Several engineering problems leading to differential equations within the scope of this course will be discussed as examples.

PREREQUISITE: It is assumed that students taking this course have some skill in manipulation of algebraic equations and knowledge of calculus.

TEXT: M. R. Spiegel, *Applied Differential Equations,* Prentice-Hall.

FEE: $80.00

ECONOMIC GEOGRAPHY

Economic geography is concerned with the characteristics of the space occupance of man in the process of earning a living. It is not to be regarded as merely a variable mixture of economics and geography, but as a practical and functional branch of human geography in which the emphasis is placed upon the material values of man's activities.

The first part of the course deals with the field and function of economic geography and its principles. Further topics studied include agriculture and other primary industries; manufacturing; transportation and other tertiary activities.

(Availability, texts, and fee to be announced)

ENGLISH COMPOSITION

The primary emphasis in this course is on the acquisition of skill in the clear and effective communication of facts and ideas.

To develop in the student an appreciation and mastery of the elements of good prose style, it requires, first, that he study the styles of a number of contemporary essayists in order that he may acquire some sense of the nature of good writing of his own time. It requires, second, the study of pertinent sections of a text in English composition, and the completion of certain exercises in that text. And it requires, third, the writing of original paragraphs and essays. In order that the student may make most fruitful use of this threefold treatment — analysis of models, study of theory, and practice — the three processes will, of course, move forward concurrently.

TEXTS: (1) N. Foerster, J. N. Steadman, revised by J. B. McMillan, *Writing and Thinking,* Houghton-Mifflin. (2) L. F. Dean, K. G. Wilson, *Essays on Language and Usage,* Oxford University Press.

FEE: $80.00

ENGLISH LITERATURE

This course aims to develop the student's capacity to appreciate literature. To do this the course seeks first to develop some understanding of what a work of literature is; what it tries to do; what means it uses to achieve its end. It seeks secondly to introduce the student to the three major areas of literature: what we commonly call poetry, literature in verse; the drama; and prose fiction, including the novel and the short story. And it seeks thirdly to acquaint the student with a number of great works. It does not pretend to be a general survey of the entire field of English literature, as within the necessary limits such a survey would be quite impossible, but it does range widely over that field, embracing works by writers as widely separated in time as Chaucer and Orwell, Shakespeare and T. S. Eliot. All the works on the course, however, have two qualities in common: every one of them offers a striking illustration of some important feature of the art of literature; and every one is an exciting piece of reading.

TEXTS:
Poetry: C. M. Coffin, G. H. Roelofs, *The Major Poets: English and American* Second Edition, Harcourt, Brace, and World.
P. Gurrey, *The Appreciation of Poetry,* Oxford University Press.
Drama: G. L. Kittredge (ed.) Shakespeare, *King Lear,* Ginn.
Miller, *Death of a Salesman.*
Sheridan, *The School for Scandal.*
Fry, *The Lady's Not for Burning.*

Novel: Austen, *Pride and Prejudice*.
         Hardy, *Tess of the D'Urbervilles*.
         Fitzgerald, *The Great Gatsby*.
         Orwell, *Animal Farm*.
         Salinger, *The Catcher in the Rye*.

Short
Story: C. L. Cline (ed.) *The Rinehart Book of Short Stories,* Rinehart.

FEE: $80.00

HISTORY AND PHILOSOPHY OF EDUCATION

An introduction to the study of education, this course first surveys the development of education from ancient times to the Reformation. Further sections of the studies deal with the forerunners of modern education; the development of national school systems; early development of education in Canada; subsequent development in Quebec; education in Ontario and other parts of English Canada; and changes in educational thought and practice in Canada. The final part of the course is concerned with modern public education — its founders; its critics, American and Canadian, and unsolved problems and unachieved objectives.

TEXTS: (1) H. G. Good, *A History of Western Education,* Macmillan. (2) C. E. Phillips, *The Development of Education in Canada,* Gage.
FEE: $80.00

HUMAN RELATIONS

From a consideration of the nature of human nature and human beings at work the studies will move on to deal with organization as essential to administration and as a human relations phenomenon. Further problems to be discussed include authority, in relation to responsibility, and the authoritarian human relationship; individual differences and levels of maturity as assets and responsibilities in administration; the individual in relation to his group-mileu; administration as education, and personal development through work. Situational case-studies will be introduced where appropriate, and the student will be encouraged to read widely in the related literature. In addition to the required texts and readings, specific references will be made to books available in inexpensive editions and in public libraries.

TEXTS: (1) H. Bowlby, *Child Care and the Growth of Love,* Pelican A271. (2) J. A. C. Brown, *The Social Psychology of Industry,* Pelican A296.. (3) K. Davis, *Human Relations at Work,* McGraw-Hill.

FEE: $80.00

INTERNATIONAL ECONOMICS

For students with a sound basic knowledge of economics, this course presents an opportunity to study the theory and practice of economic relations between trading nations.

It begins with an outline of the theory of national specialization in production. This specialization is shown to underlie the benefits to be derived from trading. Following this, the balance of international payments is examined, and various

related topics are discussed, including the concept of a "deficit" in the balance of payments. In succeeding sections the rate of exchange, the gold standard and the foreign-exchange market are presented. A study of agencies such as the International Monetary Fund completes the course.

PREREQUISITE: The theoretical content of the course will build on elementary principles of economics. Familiarity with these up to the level of a textbook such as Samuelson and Scott's *Economics* is assumed (and absolutely necessary).

TEXT: P. T. Ellsworth, *The International Economy*, Collier-Macmillan.

FEE: $80.00

INTRODUCTORY ECONOMICS

In addition to providing a thorough introduction to the study of economics, this course serves as a basis for further specialized courses.

The main sections deal with the fundamental problems of economics: the price system; national income accounting and the theory of income determination; money and banking; international trade and finance, and monetary and fiscal policy.

Additional sections are available which introduce topics of particular interest to certain groups of students: transportation economics; real estate economics and housing; labour economics, and economic development. (One of these is included in certain programmes as a final section. Special texts and readings are assigned.)

TEXTS: (1) P. A. Samuelson, A. Scott, *Economics*, McGraw-Hill. (2) R. Robinson, G. R. Munro, *Study Guide and Workbook*, McGraw-Hill. (3) J. J. Deutsch et al, *The Canadian Economy: Selected Readings*, Macmillan. OR M. H. Watkins, D. F. Forster, *Economics: Canada*, McGraw-Hill.

FEE: $80.00

LABOUR ECONOMICS

To develop an understanding of the economics of labour, this course considers the institutions in the labour market; public policy and labour management relations; collective bargaining: procedures and substantive issues; the labour market: demand, supply, wage and employment determination. Finally, some selected problems are outlined: unemployment and manpower policy, inflationary pressures, the bargaining process and the dilemma of public policy.

PREREQUISITE: A course in introductory economics. Students will be expected to review carefully the optional assignment on labour economics in the correspondence course in introductory economics.

TEXTS: (1) L. G. Reynolds, *Labor Economics and Labor Relations*, Prentice-Hall. (2) R. Lester, *Labor, Readings on Major Issues*, Random House. (3) R. E. Doherty, *Labor Relations Primer*, Ithaca: New York State School of Industrial and Labor Relations. (4) S. Jamieson, *Industrial Relations in Canada*, Macmillan. (5) A. Kruger, *Trade Unions and Collective Bargaining in Canada*, Ontario Federation of Labour.

FEE: $80.00

LINEAR ALGEBRA (MATHEMATICS IV)

In its six main units of study the course introduces the following topics, after a general introduction: vectors, vector operations, sum, difference, product; bases, linear dependence and independence, change of bases, orthogonal bases;

Simultaneous linear equations, matrix notation; operations with matrices, addition, multiplication; particular forms of matrix, null, unit, scalar, etc.; the transpose of a matrix; partitioning; elementary treatment of determinants;

Matrix inversion, determinants, partitioning, product form; linear transformations, rank, elementary transformations; solution of simultaneous equations by the inverse;

Simultaneous linear equations; Cramer's rule; Gaussian elimination; rules of rank, homogeneous equations, basic solutions, other methods of solution;

Elementary sets; lines, hyperplanes; convex sets, convex hull; a first introduction to linear programming;

Characteristic value problems; the eigenvalue and eigenvector, symmetric matrices and some methods of solution.

TEXTS: (1) G. Hadley, *Linear Algebra,* Addison-Wesley. (2) R. G. Stanton, *Numerical Methods for Science and Engineering,* Prentice-Hall.

FEE: $80.00

LINEAR PROGRAMMING

This course will cover the development and application of the linear programming concept along with the mathematical techniques relevant to the solution of problems. Although a fairly rigorous mathematical development is employed, it will be related to practical problem situations.

The simplex method will be developed first from the point of view of systems of linear equations. Subsequently matrix and geometric formulations will be considered, and variants of the simplex algorithm treated. The consideration of price in linear programming problems will lead to discussion of parametric programming and sensitivity analysis. The relation between Game Theory and Linear Programming will be shown.

The Classical Transportation Problem will be solved and used as an introduction to numerous variants of this problem including that of maximal flow in networks. Ford-Fulkerson Theory will be considered and a graph-theoretical treatment used.

Selected extensions of the theory to meet problems of integer constraints and uncertainty will be made. Decomposition of single and multi-stage problems will be discussed and related to planning. A bare introduction to non-linear programming will be made.

The material will in the main be related to the text. However, to assist the student to find his way through the extensive literature, some additional notation will be used.

PREREQUISITE: Familiarity with matrices and linear algebra will be helpful.

TEXT: George B. Dantzig, *Linear Programming and Its Extensions,* Princeton University Press.

FEE: $80.00

MANAGEMENT SCIENCE

From the historical development of classical management principles, this course traces the applications of social psychology, decision theory, feedback control, and organization theory to the contemporary problems of executive decision-making and leadership. Continuing with an evaluation of relevant economic concepts as bases for both qualitative and quantitative analyses, there are detailed discussions of competitive structure, demand analysis, production activity analysis, and the interaction of pricing, promotional, and product-line strategies.

Mathematical models and techniques such as *linear programming* and *system simulation* are used as bases for both qualitative and quantitative analyses.

PREREQUISITE: Knowledge of elementary algebra and calculus is required.

TEXT: D. J. Clough, *Concepts in Management Science,* Prentice-Hall.

FEE: $80.00

MANAGERIAL ECONOMICS

This course is designed to provide students who have already studied basic economic theory with an opportunity to consider the ways in which such theory can be utilized in making business decisions.

The topics which will be studied include market structure, management decisions and profit, demand analysis, cost analysis, sales analysis, sales promotion, pricing decisions and capital budgets.

PREREQUISITE: An introductory course in economics

TEXTS: (1) M.R. Colberg, D. R. Forbush, G. R. Whitaker, *Business Economics, Principles and Cases,* Richard Irwin. (2) Joel Dean, *Managerial Economics,* Prentice-Hall.

FEE: $80.00

MARKETING

The emphasis in this course is analytical. The rationale of the course is fairly simple: marketing problems are best solved when placed within the context of a planned marketing programme. Some of the problems considered in the course are those of market research, adapting the product to the market, distribution, advertising and selling, and pricing. The student will learn of these problems from his readings: he will attempt to solve such problems by becoming involved in a series of marketing cases.

TEXT: H. L. Hansen, *Marketing: Text, Techniques and Cases,* Richard Irwin.

FEE: $80.00

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MATHEMATICS FOR MANAGEMENT

In this introduction to the mathematical concepts and techniques which are essential to understanding the decision-making processes used in the modern administration of business and government, the student does not learn to prove rigorously mathematical theorems, but to understand mathematical concepts and to use them in handling certain types of problems.

Students completing this course should be better prepared for courses in economics, finance, marketing, production, statistics, and computer programming. Students desiring to study management science, operations research, or other areas of advanced applied mathematics should take courses in calculus, linear algebra, and probability and statistics. While this course is not primarily designed to prepare students for such further courses in mathematics and its applications, it may nevertheless be helpful for this purpose.

The six main sections deal with logic and sets; the real number system, graphs and functions; linear algebra; probability; non-linear functions and progressions; and calculus. Optional assignments will provide for students who wish to study "enrichment topics" related to certain sections of the main course: linear programming; integral calculus; and model building.

PREREQUISITE: Students taking the course are assumed to have some familiarity with high school mathematics, but not necessarily with the "new mathematics".

TEXT: F. P. Fowler, E. W. Sandberg, *Basic Mathematics for Administration*, Wiley and Sons.

FEE: $80.00

MODERN POLITICAL IDEAS

This course is designed to examine those bodies of political thought which have been most influential in the modern world. The emphasis of the course is two-fold: first, to elucidate the central postulates of each political system and, secondly, to trace the impact which these ideas have had on political history.

After a brief introduction to the general nature of political theory and the main stages in the evolution of Western political thought, the course concentrates on three main streams of political thought — Democracy, Marxism and Nationalism. Under the democratic tradition, an analysis of the principal ideals of liberal democracy is accompanied by considerations as to the conditions under which such ideals are best realized. In addition, reference is made to non-liberal, totalitarian democracy as well as to the basic debate between the left and right within Western Democracies. The section on Marxism deals with both classical Marxism and later revisions of Marx's doctrine in the Soviet Union and other Communist territories. Under Nationalism, there is some consideration of the genesis of the idea of nationalism and the emergence of both liberal and authoritarian nationalism in the modern world. A concluding section sums up the current state of political thinking and speculates on new departures which political theory is likely to take in the future.

TEXTS: (1) C. Cohen, *Communism, Fascism and Democracy*, Random House. (2) S. Hook, *Marx and the Marxists*, Anvil. (3) H. Kohn, *Nationalism, Its Meaning and History*, Anvil. (4) A. D. Lindsay, *The Modern Democratic State*, Galaxy.

FEE: $80.00

NUMERICAL ANALYSIS

The aim of this course is to investigate different algorithms for solving certain mathematical problems. The emphasis is placed on learning when a specific method may be used successfully and on comparing different methods (for the same problem) for speed, accuracy and ease of programming.

The topics considered include flow charts, computational errors; solution of nonlinear equations; secant, Müller, Newton-Raphson, Lin-Bairstow methods; simultaneous linear equations; gaussian elimination and Gauss-Seidel methods; eigenvalues and eigenvectors of matrices; power method; interpolation; integration; trapezoidal and Simpson's rules, Romberg integration; initial-value problems in ordinary differential equations; Runge-Kutta methods, predictor-corrector methods, stability criteria; boundary-value problems; data approximation, and least-squares approximation.

PREREQUISITE: An elementary knowledge of computer programming will be very useful for this course.

TEXT: R. Beckett, J. Hurt, *Numerical Calculations and Algorithms,* McGraw-Hill.

FEE: $80.00

OPERATIONS RESEARCH METHODS

This course is intended to present a reasonably balanced selection of operations research methods and techniques. It is not a complete coverage because the literature of the field is vast and applications occur in almost every branch of engineering, industry, and government.

For the purposes of study and problem assignment, the course is divided into the following sections:

Introduction to basic concepts: Methods of science applied to the solution of operational problems; mathematical modelling of operating systems, design and analysis of industrial experiments. Classification of mathematical models: deterministic and probabilistic models, areas of application, classification by technique employed. Techniques of mathematical optimization.

Resource allocation models: Elementary mathematics of linear and dynamic programming. Applications to transportation, distribution, product mix, and production planning problems.

Inventory models: Elementary calculus and finite difference methods. Applications to various inventory and production control situations.

Queuing models: Elementary difference equations. Applications to waiting-line, maintenance, inventory, and reliability problems. Monte Carlo simulation methods.

Replacement models: Elementary mathematics of finance. Applications to replacement of equipment and plant that deteriorates with time. Group replacement of items that fail. Maintenance problems.

PREREQUISITE: Previous studies in probability and statistics are assumed.

PROBABILITY AND STATISTICS

The increasing use of quantitative methods in decision-making has made familiarity with this subject important in management as well as in engineering. This introductory course provides for this need and is also an appropriate preparation for further courses in operational research and management science.

The main topics are the fundamental concepts of probability; discrete and continuous case; probability distributions and density functions; mathematical expectation of random variables; moments and moment generating functions; sum of random variables, sampling distributions (normal, chi-square, t and F distributions); point and interval estimation; tests of hypotheses; regression, correlation and analysis of variance.

PREREQUISITE: A course in differential and integral calculus. (No previous knowledge of probability and statistics is assumed.)

PSYCHOLOGY

In this course the student will be introduced to some of the important basic psychological concepts. The scientific rationale of psychology will be discussed, and its experimental and theoretical development will be indicated through consideration of various aspects of human behaviour.

Among the subjects to be studied are the plasticity of behaviour, maturation, intelligence, motivation, perception, and learning. The course will also touch upon some important facets of group behaviour.

QUEBEC CIVIL CODE

It is the aim of this course to examine those areas of the civil law of Quebec which govern relationships encountered in business affairs, rather than to attempt a comprehensive study of the Code.

The main topics considered are: introduction to civil law: definitions of law and philosophy of law: sources of civil law: major differences from common law: decisions of courts and effects on interpretation; structure of civil courts; scope of civil law: the law of persons: enjoyment of civil rights: acts of civil status: domicile: marriage: minority: the law of property: definition of ownership and explanation of concept of dominium: classification of property: of

rights limiting ownership; emphyteutic leases; transmission of property; the law of contract: general requisites; causes of nullity; extinction of obligations; sale; instalment sales; bulk sale; lease and hire; mandate; loan; security; privileges; registration of real rights; prescription; partnership; quasi-contract; delicits (torts); the law of evidence: distinction between civil and commercial transactions; explanation of proof by testimony; basic rules of evidence.

A reference copy of the Civil Code of Quebec is required.

FEE: $80.00

REAL PROPERTY ANALYSIS

This course is designed to provide students who have already studied basic economic history and theory both in general and with particular reference to their implications for the use and value of real property, with an opportunity to extend their knowledge. The various readings and assignments combine both the underlying theoretical concepts and the ways in which these have actually evolved in Canadian communities and regions. Considerable latitude is allowed in the assignments so that students may relate the underlying course material and readings to their own experiences. The bulk of the assignments are of an analytical and problem-solving type, and even those which are seemingly theoretical have many practical applications.

(Availability, texts, and fee to be announced)

REAL PROPERTY VALUE

This course involves a critical examination of the principles of land utilization, with discussions of the history of the pattern of land use and the structure of the real property market; the principles of value, with an investigation of the historical development of ideas on value and a discussion of the factors which contribute to it; the principal agents in production of real property value — land and capital — and the three approaches to value — the market data approach, the cost approach, the income approach. A concluding section is in the form of a demonstration problem illustrating the concepts and principles discussed.

(Availability, texts, and fee to be announced)

SCHOOL FINANCE AND ACCOUNTING

This course is an extension of the basic course in accounting designed to show the student how the standard accounting procedures covered in that course can be adapted to meet the peculiar needs of school administrative units.

The first part of the course is devoted to a detailed description of the accounting and bookkeeping procedures required to handle school board revenues and expenditures, assets and liabilities, both current and capital. The emphasis throughout this discussion is on the need for procedures which will meet the problems imposed by the stringent legal restrictions and obligations imposed on school boards and the consequent importance of the budget procedure and of the control of expenditure.

The balance of the course is devoted to various special topics; the use of accounting data in the preparation of the budget and in the subsequent control of expenditure within the framework provided by the budget; the preparation of detailed, yet comprehensive, financial reports and statements for the guidance of the board, the information of its officials, and to meet the requirements of senior levels of government; and the use of accounting as an aid to the efficient administration of the school system through systems of reporting and control. Some attention will also be paid to the use of various kinds of recording devices and accounting machines as aids to the record-keeping process.

PREREQUISITE: Knowledge of the basic principles of accounting is required.

TEXT: L. G. McPherson, W. G. Leonard, *Municipal Accounting in Ontario,* Ryerson Press, Toronto, for the Department of Municipal Affairs, Ontario. The book may be obtained from: The Department of Municipal Affairs, 801 Bay Street, Toronto 5, Ontario. Payment in the amount of $4.25 must accompany the order. Cheque or money order should be made payable to the Provincial Treasurer.

FEE: $80.00

SCHOOL LEGISLATION

With particular attention to the statutes of Ontario, this course deals with various aspects of public education: the administration of publicly-supported schools in Ontario; some historical background; administrative areas and school boards; the changes brought about since January 1, 1969; various committees of boards; powers and duties of school boards in relation to: the Minister and Department of Education; general duties; schools and school sites; pupils and teachers. The final part of the course is concerned with provincial grants to school boards in Ontario.

PREREQUISITE: A course in business or commercial law

FEE: $80.00

SOCIAL PSYCHOLOGY

The first part of this course is devoted to relevant topics from general psychology, while the remainder is concerned with social psychology.

Concepts related to the study of human behaviour and the measurement of behaviour are considered in the introductory section of the course; succeeding sections deal with learning and the nature of human nature; motivation; social perception and attitude formation; attitude change and behaviour in groups.

TEXTS: (1) D. Krech, R. S. Crutchfield, E. L. Ballachey, *Individual in Society,* McGraw-Hill. (2) W. W. Lambert, W. E. Lambert, *Social Psychology,* Prentice-Hall.

FEE: $80.00

TAXATION (Income Tax)

This course is intended to give the student a general appreciation of the basic principles of Canadian income tax. It should also prepare him to follow significant changes in the tax law as they occur.

Introductory sections deal with the importance of taxation in a modern economy; a brief history of Canadian taxation; the report of the Royal Commission on Taxation and probable reforms. The main sections of the course are concerned with the taxation of business corporations; depreciation; the taxation of individuals; capital gains taxation; employee benefits and estate planning, while the final part deals with residence, tax forms, and administration.

TEXTS: (1) *Canadian Income Tax Act,* CCH Canadian Limited. (2) *Canadian Master Tax Guide,* CCH Canadian Limited.

FEE: $80.00

TRANSPORTATION ECONOMICS

The purpose of this course is to develop an understanding of the principles of transportation economics, with particular reference to transportation in Canada.

It will include an analysis of the cost structures of the various carriers and modes of transportation and the effect of such costs on the carriers' pricing decisions; a brief study of the general rate case and the theory of individual rate making; and an examination of the National Transportation Act as well as other government legislation and policies affecting transportation.

The first portion of the course deals with transportaiton economics in the micro or firm situation, while the latter part deals with transportation in a macro sense, mainly reflecting public policy considerations and the effect of transportation on the overall economy.

PREREQUISITE: An introductory course in economics

TEXTS: (1) A. W. Currie, *Canadian Transportation Economics,* University of Toronto Press. (2) *The Annals of the American Academy of Political and Social Science,* Vol. 345, January, 1963: *Transportation Renaissance.*

FEE: $80.00

TRANSPORTATION LAW

A survey of the law related to various modes of transportation, the course first deals with some of the constitutional problems relating to transportation in general, the common carrier and his liability for goods and passengers, and bills of lading. The remaining topics include the structure and functions of the Canadian Transport Commission; railway law, with particular reference to the constitutional aspects of the subject; the organization of railway companies; the planning, financing and construction of railways; and the duties and liabilities of railways with respect to passengers and goods; the law relating to inland and ocean-going shipping, ships and their ownership, regulation of shipping, collisions, and liability for carriage; the liability of carriers by air, with particular

reference to the Warsaw Convention, and finally the law relating to motor ve-
hicle transportation, with special consideration of the constitutional problems
involved, the provincial regulatory bodies, the Interstate Commerce Commis-
sion, and the liability of carriers of passengers and goods.

PREREQUISITE: A course in business or commercial law

FEE: $80.00

VIBRATION ANALYSIS

An understanding of vibration theory is developed through guided study and
submission of assignments on the following topics: harmonic motion; single
degree of freedom vibration, free and forced, undamped and damped; balancing
and measurement; two degree of freedom systems; systems with many degrees
of freedom; vibration of elastic bodies; analogues and computers.

The mathematics involved will deal principally with the setting up and solving
of second order differential equations, although complex and matrix algebra
will be introduced.

PREREQUISITE: A knowledge of elementary differential equations

TEXT: W. T. Thomson, *Vibration Theory and Applications,* Prentice-Hall.

FEE: $80.00

Other Extension Programmes

General Arts Course leading to the Bachelor of Arts degree.

General Science Course leading to the Bachelor of Science degree.

Bachelor of Science in Nursing Course leading to the Bachelor of Science in Nursing degree.

Bachelor of Applied Science leading to the Bachelor of Applied Science degree.

Computer Science 228 — programming techniques for data processing.

Applied Mathematics 231 — numerical methods.

Computer Science 301 — introduction to computing.

Diploma Course in Translation — French-English-French is designed for both French and English speaking students, and provides a formal training for aspiring translators.

Certificate Course in Criminology examines some of the basic problems in the study of crime, the administration of criminal justice, and the treatment of offenders. It is intended primarily for persons normally identified with law enforcement, criminology, adjudication, and the correctional services. One or two subjects may be taken each year with six subjects required for graduation.

Certificate Course in Public Administration is intended primarily for those with considerable experience in the public service who wish to acquire a broader background in the political and social sciences essential to an understanding of the executive branch of government and its functions. Emphasis is on Canadian governments at all levels (federal, provincial, and municipal) and their major problem areas. One or two subjects may be taken each year with six subjects required for graduation.

Certificate Course in Business provides instruction in the basic principles of modern business. This course is designed for mature men and women in business, industry, and the Civil Service who are in, or working toward, positions of responsibility. One or two of the six subjects may be taken each year with six subjects required for graduation.

FOR FURTHER INFORMATION TELEPHONE 928-2393

Other Calendars and Publications

The University of Toronto issues the following calendars and other publications concerning courses of instruction given by the University, any one of which may be had on application to the Office of Admissions of the University, or to the Secretary of the Faculty, School or Institute about which information is sought.

GENERAL INFORMATION	University of Toronto Handbook
ADMISSION INFORMATION	Admission Awards Admission Circular
APPLIED SCIENCE AND ENGINEERING	Faculty of Applied Science and Engineering Engineering at Toronto—descriptive brochure Diploma Course in Operations Research
ARCHITECTURE	Faculty of Architecture, Urban and Regional Planning and Landscape Architecture Landscape Architecture—descriptive brochure Graduate Work in Architecture—descriptive brochure
ARTS AND SCIENCE	Faculty of Arts and Science Courses and Subjects in Arts and Science Diploma Course in Computing and Data Processing
BUSINESS	School of Business—Graduate Programme in Business Administration
CHILD STUDY	Institute of Child Study
DENTISTRY	Faculty of Dentistry Division of Postgraduate Dental Education Division of Dental Hygiene
EDUCATION	The College of Education Graduate Degrees in Education*
EXTENSION	Degree Courses in Extension Certificate Course in Business Certificate Course in Public Administration Certificate Course in Criminology
FOOD SCIENCES	Faculty of Food Sciences
FORESTRY	Faculty of Forestry
GRADUATE STUDIES	School of Graduate Studies
HYGIENE	School of Hygiene
LAW	Faculty of Law
LIBRARY SCIENCE	School of Library Science
MEDICINE	Faculty of Medicine Division of Rehabilitation Medicine Division of Postgraduate Medical Education

MUSIC	Faculty of Music
	The Royal Conservatory of Music
	   School of Music Year Book
	   General Syllabus
	   Pianoforte and Theory Syllabus

NURSING	School of Nursing
PHARMACY	Faculty of Pharmacy
PHYSICAL AND HEALTH EDUCATION	School of Physical and Health Education
SOCIAL WORK	School of Social Work

*Write to: Ontario Institute for Studies in Education, 102 Bloor Street West, Toronto 5, Ontario.

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1968—1969

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            D. J. McCulloch, B.A., M.D., D.Psych., F.R.C.P.(C)
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    —Men . . . . W. A. Stevens, B.S.
Director of Athletics and Physical Education
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Application Form

UNIVERSITY OF TORONTO
DIVISION OF EXTENSION
84 QUEEN'S PARK
TORONTO 5

Business, Engineering, Nursing
and Special Programmes

Course _____

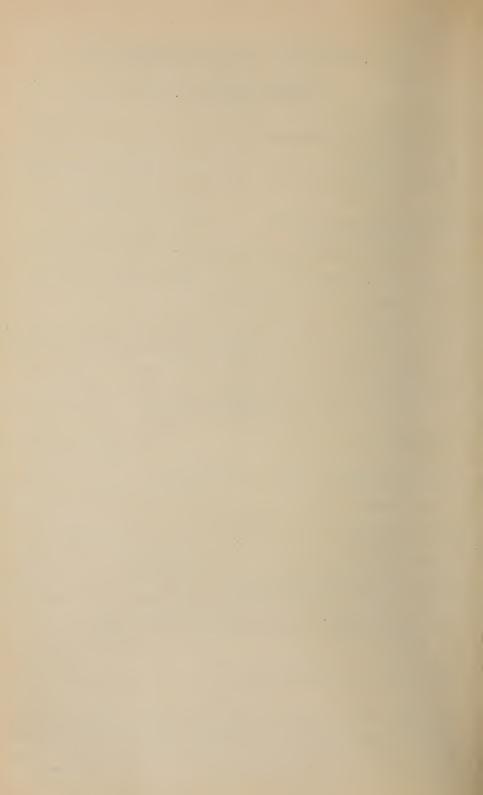Day/Evening _____

Time/Campus _____

	MR.
NAME	MRS.
	MISS _____

(please print and underline surname)

ADDRESS _____

TELEPHONE: HOME _____ BUSINESS _____

COMPANY NAME _____

COMPANY ADDRESS _____

PRESENT POSITION _____

FEE $ _____ CASH ☐ PERSONAL CHEQUE ☐ COMPANY CHEQUE ☐

Make cheques payable to the UNIVERSITY OF TORONTO, please.

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Any course may be cancelled if there is insufficient enrolment. Requests for refunds must be made before the second session of the course, and such requests must be accompanied by the University's official receipt. An administration fee of $7.00 will be charged in the case of all refunds.
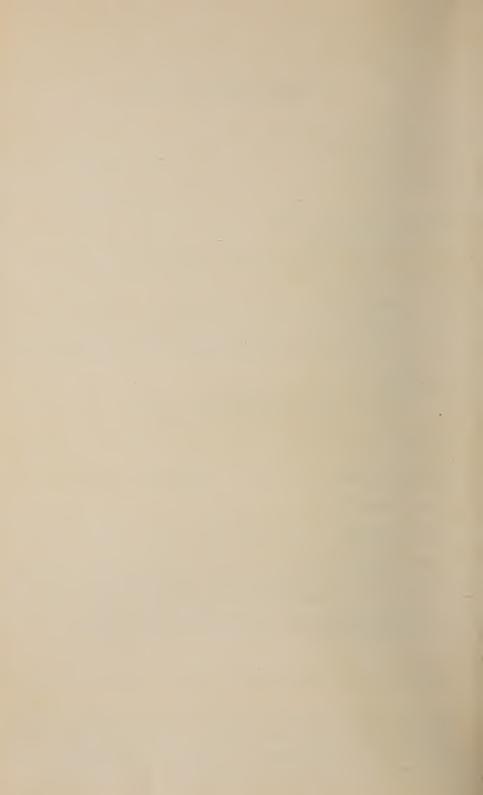
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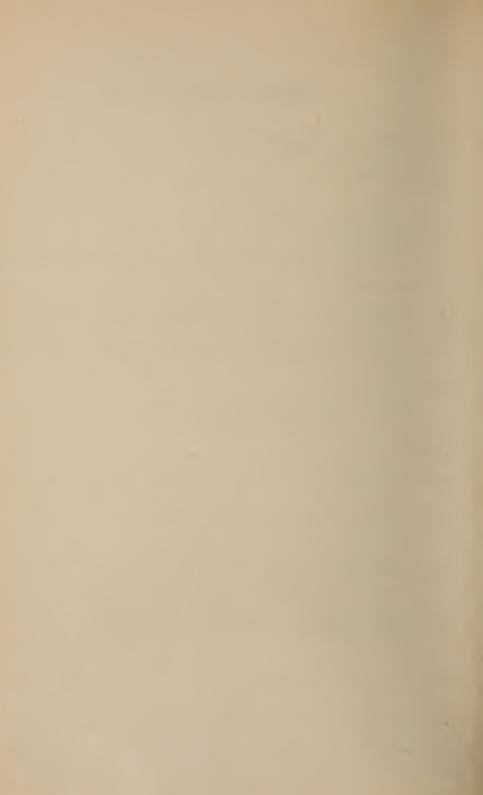
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